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Worldwide Report

EPIDEMIOLOGY

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WORLDWIDE REPORT EPIDEMIOLOGY

CONTENTS

HUMAN DISEASES

BANGLAI	DESH	
	Briefs Gastroenteritis Outbreak Influenza Epidemic	
BOTSWA	ANA	
	Briefs Child Immunization Program Discussed	:
CANADA		
	Ontario Laboratory To Test for Dangerous Diseases Announced (THE CITIZEN, 21 Jul 84)	
	Birth Defects Studied in Area of Spraying, Toxic Wastes (THE TORONTO STAR, 2 Aug 84)	
	Ontario Doctors Call for In-Depth Study of Herpes Law (Peter Cheney; THE TORONTO STAR, 3 Aug 84)	
	Briefs Edmonton Syphilis Manitoba Encephalitis Threat Legionnaires' Disease at Hospital	
GUYANA		
	Government Taking Steps To Halt Spread of Typhoid (SUNDAY CHRONICLE, 5 Aug 84)	9

	Briefs	Malaria Outbreak	
		-	1.
HONG K	ONG		
	Suppli	es of Blood, Plasma To Be Centralized at Red Cross (SOUTH CHINA MORNING POST, 26 Jul 84)	12
	Briefs	Hepatitis Immunization	13
INDIA			
	Briefs	Jaundice in Gujarat Malaria in Tripura	14
INDONE	SIA		
	Malaria	a Eradication Drive in East Kalimantan (ANTARA NEWS BULLETIN, 10 Aug 84)	15
MALAWI			
	Semina	r Discusses Child Immunization Program (DAILY TIMES, 19 Jul 84)	16
	Briefs	Anti-Bilharzia Efforts	17
NAMIBI.	A		
	Soldier	rs Reportedly Safe From Malaria (THE CAPE TIMES, 14 Aug 84)	18
	Briefs	Treatment-Resistant Malaria Discovered	19
NIGERI	A		
	Briefs		
		Spent on Vaccines 1,3000 Children Die Daily Black Market Vaccination Cards Gastroenteritis Deaths	20 20 20
		'Schistosomiasis' Abeokuta Cholera Vaccine	21 21 21

PAKISTAN

WHO Experts To Study Mystery Disease in Punjab District (DAWN, 27 Aug 84)	22
Mystery Disease Said Still Raging (DAWN, 28 Aug 84)	23
PEOPLE'S REPUBLIC OF CHINA	
XINHUA Report on Improved Public Health Since 1949 (XINHUA, 13 Sep 84)	24
Contagious, Parasitic Disease Symposium Summary (Zhang Naizheng; ZHONGHUA NEIKE ZAZHI, No 2, 20 Feb 84)	26
Incidence of Malaria Drops on Hainan Island (HAINAN RIBAO, 8 Apr 84)	34
Cases of Epidemic Hemorrhagic Fever Reported (Zi Weilian; HEBEI RIBAO, 21 Apr 84)	36
Progress Made in Vaccine for Hepatitis (JIANKANG BAO, 1 May 84)	38
Measures To Prevent Viral Hepatitis (Wang Juntao; GUANGMING RIBAO, 11 May 84)	39
RENMIN RIBAO on Endemic Disease Prevention (RENMIN RIBAO, 4 Sep 84)	41
Briefs Water Supply, Sanitation Workshop	43
PHILIPPINES	
Health Ministry Urges Diphtheria, Polio Shots (BULLETIN TODAY, 20 Aug 84)	44
Eight Die in Bicol Measles Outbreak (Roy Sinfuego; BULLETIN TODAY, 26 Aug 84)	45
SOUTH AFRICA	
Briefs Rabies Epidemic Fading	46
TRINIDAD AND TOBAGO	
Briefs Deaths From AIDS	47

UNITED KINGDOM

	Govern	ment Plans Vaccination Drive To Eliminate Measles (David Fletcher; THE DAILY TELEGRAPH, 1 Aug 84)	48
VIETNA	M		
	Increa	se of Syphilis in Vietnam Noted (Nguyen Thi Dao, Nguyen Thanh; Y HOC VIET NAM, Jun 84)	49
ZAMBIA		s To Combat Hemorrhagic Fever Urged (Pham Nang Cuong; HANOI MOI, 11 Jul 84)	51
	Briefs	Meningitis Checked Vaccines Run Out	52 52
		ANIMAL DISEASES	
BANGLAI	DESH		
	Briefs	Suspected Rabies Cattle Disease Epidemic	53 53
MALAWI			
	Briefs	Dogs Vaccinated	54
NIGERIA	A		
	Govern	ment Allocates Funds for Anti-Rinderpest Campaign (NEW NIGERIAN, 16 Aug 84)	55
•	Briefs	Rinderpest Kills Cattle	57
PEOPLE'	'S REPUI	BLIC OF CHINA	
	Guangx	i Conference Discusses Rabies Problem (Guangxi Regional Service, 24 Aug 84)	58
ZIMBABV	√ E		
	Rabies	Under Control (THE HERALD, 25 Aug 84)	59

Mongoose Sparks Rabies Alert (THE SUNDAY MAIL, 26 Aug 84)	60
PLANT DISEASES AND INSECT PESTS	
BANGLADESH	
Widespread Area of Paddy Attacked by Rice Pests (THE NEW NATION, 16 Aug 84)	61
CANADA	
Grasshoppers Attack Grain Crops in Saskatchewan, Alberta (Paul Grant; THE GLOBE AND MAIL, 20 Jul 84)	62
Tomato Disease Damages 5 Percent of Ontario Crop (John Spears; THE TORONTO STAR, 20 Jul 84)	64
Spruce Budworm Outbreak in New Ontario 'Serious' (Christie McLaren; THE GLOBE AND MAIL, 3 Aug 84)	65
PAKISTAN	
Pesticides Dealers Warned Against Irregularities (DAWN, 5 Sep 84)	67
Sale of Sub-Standard Pesticides Denied (DAWN, 5 Sep 84)	68
NLC To Spray Cotton Crops (DAWN, 5 Sep 84)	70
Cotton Crop To Be Sprayed With DDT (DAWN, 26 Aug 84)	71

GASTROENTERITIS OUTBREAK--The slow receding trend of all rivers in the four river basins of the country continued on Saturday. There was no rainfall significant enough to reverse the trend. Meanwhile, the death of 25 persons due to outbreak of gastroenteritis has been reported from the Angorpota and Dahagram enclaved in the aftermath of the current floods. Our Rangpur Correspondent reports: 12,000 people of Dahagram and Angorpota have been severely affected by flood of river Teesta and incessant heavy rains. [Excerpts] [Dhaka THE BANGLADESH TIMES in English 12 Aug 84 p 1]

INFLUENZA EPIDEMIC--Bagerhat, Aug 14--Influenza has broken out in an epidemic form in the Bagerhat district including the district town. About 60 percent people are learnt to have been suffering from the disease. The disease is mainly broke out in Bagerhat Sadar, Mollahat, Fakirhat, Kachua and Morrelganj upazilas. In many cases this influenza is reported to have taken a turn to typhoid. A good number of people are suffering from Typhoid and bowls trouble, it is reported. According to an information available here one Adil Tarafdar of village Baniagati within Bagerhat Sadar Upazila died of typhoid only a few days ago. It was stated that the deceased first attacked with influenza. Ultimately it turned into typhoid. [Text] [Dhaka THE NEW NATION in English 16 Aug 84 p 2]

CSO: 5450/0097

CHILD IMMUNIZATION PROGRAM DISCUSSED—MAHALAPYE, August 9: About 150 infants were innoculated against measels in Ramokgonami in Tswapong South following an outbreak of the disease which so far is said to have claimed 8 lives. The Health Assistant in the area, Mr Bathusi Regoeng urged parents to isolate children who had contracted the disease. He pointed out that most infants innoculated were between the ages of 9 months and two years. The Headteacher at Ramokgonami Primary School, Mr K. Lefoko said that about 100 pupils had contracted the disease in June immediately after the outbreak. [Text] [By Moagi Lefenva] [Gaborone BOTSWANA DAILY NEWS in English 15 Aug 84 p 2]

ONTARIO LABORATORY TO TEST FOR DANGEROUS DISEASES ANNOUNCED

Ottawa THE CITIZEN in English 21 Jul 84 p 13

[Text]

TORONTO (CP) — The Ontario government is building Canada's first maximum-containment laboratory to test for suspected cases of "exotic, dangerous and highly contagious diseases."

An official of the Health Ministry says residents in the Toronto suburb of Etobicoke should have no fears that dangerous viruses will escape from the \$2.3-million laboratory, scheduled for construction this year.

John McHugh, assistant director of information services for the Health Ministry, said the laboratory will be a "public health benefit" because it would speed up the diagnosis of rare diseases picked up by travelling residents or visitors.

There are only a few maximum-containment laboratories in the world, including the Centres for Disease Control in Atlanta, where Ontario specimens now are sent. Specimens from other parts of Ontario and Canada would be tested at the laboratory.

"Toronto is the major port of

entry in Ontario," McHugh said.
"A lot of suspected cases would be in this area."

Despite the highly contagious nature of the specimens to be tested in the laboratory, Blake Millar, architect and overseer of the project, said the structure will be as "secure as any that exist in the world today.

"It's one of the most expensive enclosed facilities outside of space craft," Millar said.

The laboratory, to be housed in a 90-square-metre room on the third floor of the ministry's existing central laboratory, will include such safety and security measures as steel-reinforced walls and a concrete floor and ceiling that resists extreme changes in temperature and humidity.

Other features are a separate air supply that will go through three sets of filters before being released outside and a separate drainage system to collect liquid waste in tanks where it will be disinfected and incinerated.

CSO: 5420/2

BIRTH DEFECTS STUDIED IN AREA OF SPRAYING, TOXIC WASTES

Toronto THE TORONTO STAR in English 2 Aug 84 p A7

[Text] Simcoe County has had three instances of abnormally high rates of birth defects since 1977, an Ontario Ministry of Health study indicates.

However, the study also says the higher-than-expected statistics are not clustered in any particular area of the county

and weren't sustained over a period of years.

The study was undertaken to determine whether incidents of birth defects, stillbirths and miscarriages were concentrated in Simcoe's Tiny Township, the centre of public concern in recent years over the aerial spraying of pesticides on potato fields by Hostess Farms Ltd.

A landfill site believed to be leaking toxic wastes into ground-water and wells near the village of Perkinsfield has also concerned the local citizenry.

According to the study by two public health branch epidemiologists, there were 42 stillbirths in Simcoe County in 1977, compared with the 28.2 expected.

Between 1975 and 1979, the study found 19 cases of hydrocephaly — commonly known as water on the brain — while 11.8 cases were expected. Seven occurred in 1978-79, none of them in Tiny Township.

Isolated cases

The study also found four cases of anencephaly — infants born with a partial brain or no brain — in 1982, while 1.4 were expected.

CSO: 5420/3

These occurred in separate areas of the county, with none found in Tiny Township.

High rates in the three instances appeared to be isolated situations, the study said, adding the still-births were likely related to individual mothers' health and life-styles. The other two instances likely occurred by chance, the study said.

Dr. Bertram Phillips, Simcoe's medical officer of health, said the study puts his concerns to rest and "others' fears should be allayed just as mine are."

Main concern

Phillips said residents' main concern was the effect of pollutants from the spraying but the study shows no significant indications of increased birth defects.

The study, which included 60 subgroups of defects, followed a federal probe of cancer deaths in Simcoe County carried out at the request of a local citizens' group.

The federal study found deaths from lymphoid, ovarian and digestive tract cancer were several times the rate expected in some parts of the county but did not include the causes of the cancer.

ONTARIO DOCTORS CALL FOR IN-DEPTH STUDY OF HERPES LAW

Toronto THE TORONTO STAR in English 3 Aug 84 p A3

[Article by Peter Cheney]

[Text] A new law that requires doctors to give the names of patients suffering from genital herpes to health officials has sparked controversy among the Ontario medical community as doctors concerned about their patient's privacy—and hefty fines—try to figure out how the legislation affects them.

At a meeting of the Ontario Medical Association's board of directors yesterday, worried doctors voted for an in-depth study of the province's new Health Protection and Promotion Act, which requires that doctors report all cases of Herpes Simplex II, and provides for fines of up to \$5,000 for doctors who fail to comply.

"Doctors are caught in a dilemma," OMA board member Dr. Michael Thoburne said in a telephone interview. "We want to comply with the law, but we have to keep in mind that we may be faced with making a patient's name public."

Though doctors have been required for years to report syphilis, gonorrhea, and many other communicable diseases, Thorburne says herpes is different. "It's a very difficult disease to diagnose."

Statistical Information

Ministry of Health officials say the law is designed only to collect statistical information about herpes. "All we want to know is how much herpes is out there," says Dr. Jackie Carlson, a senior medical consultant with the Ministry of Health. "We don't even want the names."

Though the ministry of health will catalogue cases strictly by number, doctors must give patients' names and addresses to local medical health officers, who then pass the information, names deleted, to the ministry.

"Health units are very careful about confidentiality," says Dr. Richard Schabas, East York's Medical Officer of Health. "I haven't heard of any breaches."

Despite these assurances, doctors are worried. "Herpes isn't like other diseases," said Thoburne. "It's a devastating diagnosis to give." Thoburne said there was "general concern" among OMA board members about their patients' privacy.

Lynne Becket, an OMA media-spokesman, says the OMA has received "at least a dozen" phone calls from herpes patients who are concerned that their names could be leaked.

CSO: 5420/3

EDMONTON SYPHILIS--EDMONTON (UPC) -- The number of reported cases of syphilis in the city has almost tripled in one year and the upward trend is continuing, a public health official says. Dr. Barbara Romanowski, Alberta government director of social hygiene services, said 118 cases of syphilis were reported last year, compared with 41 cases in 1982, an increase of 188 per cent. In the first three months of this year, 56 cases were reported. Romanowski said that such figures indicate an epidemic, and that public health workers have traced the disease to a downtown zone frequented by prostitutes, which is known locally as "the strip" or "the drag." She said a "very high percentage" of prostitutes who work that area of the city have syphilis, which is then spread through their clients into the community. Two babies born to infected mothers died last year, she said. No cases of syphilis have been reported in Edmonton's other red-light district, on 105th Street downtown, known as "the stroll," she said. Health officials have hired two full-time nurses to mingle with prostitutes and urge them to seek treatment. The strains of infectious syphilis active in Alberta are curable with penicillin treatments in about two weeks, Romanowski said. [Text] [Toronto THE TORONTO STAR in English 19 Jul 84 p 13]

MANITOBA ENCEPHALITIS THREAT--WINNIPEG--The threat exists of another outbreak of western equine encephalitis, a brain-damaging and potentially fatal disease spread by the Culex tarsalis variety of mosquito, Manitoba health authorities say. Dr. John Wilt, assistant deputy minister of health, said yesterday large numbers of the potentially harmful mosquitoes have been found among the common nuisance mosquitoes in Winnipeg and The Pas and a horse near Winnipeg is believed to have contracted the disease. The virus has a shorter incubation period in horses than in humans, so it shows up first in horses. Sixteen people have been suspected of having the disease, but all results were negative, So far, the disease has not appeared in chicken flocks, which the province has set up in 12 areas of Manitoba to test for the presence of the virus. Mosquitoes are especially numerous this year following heavy rains and hot weather. Ground-fogging with the insecticide malathion in Winnipeg reduces the nuisance for only two days. Last year and in 1981, the province conducted controversial and costly aerial-spraying programs because of the threat of the disease, but some scientists question the effectiveness of such programs. Last year, 18 people contracted encephalitis and a girl died. Two of 25 who contracted the disease died in 1981. Some victims suffered long-term mental disorders. [By Brian Gory] [Toronto THE GLOBE AND MAIL in English 19 Jul 84 p 8]

LEGIONNAIRES' DISEASE AT HOSPITAL—Halifax (CP)—The cause of the legionnaires disease outbreak that killed two patients at Camp Hill Hospital is believed to have been eliminated, a medical official says. Dr. Tom Marrie, head of the infectious disease division of the Victoria General Hospital, told reporters that tests confirmed the bacteria originated in the veterans hospital's water system—likely in the showerheads, where some organisms were found. The showerheads were dismantled and cleaned and the hospital's water supply is being sterilized. The hospital stopped admitting patients a week ago after discovering the disease in six elderly patients, two of whom died. Two more cases were suspected at the time and were confirmed Thursday. The two who died were already seriously ill, and the hospital said it was not possible to determine whether the disease was the cause of death. Of those who still have the disease, one is seriously ill and the others have responded to treatment, Marrie said. [Text] [Toronto THE TORONTO STAR in English 1 Aug 84 p A21]

CSO: 5420/3

GOVERNMENT TAKING STEPS TO HALT SPREAD OF TYPHOID

Georgetown SUNDAY CHRONICLE in English 5 Aug 84 pp 8-9

[Text] THE Health Ministry yesterday confirmed reports of a recent increase in the number of typhoid cases, and said steps are being taken to control the disease.

Chief Medical Officer Dr. Walter Chin told the GNA that within the last month about 100 cases of typhoid were reported from Herstelling on the East Bank of Demerara.

And, more recently, 40 persons living between Patentia and Hubu on the West Coast, Demerara were treated for typhoid.

The CMO explained that the use of water from an old reservoir in the Herstelling neighbourhood was most likely responsible for the cases of typhoid in that area.

He further explained that since the reservoir was sealed off by the Guyana Water Authority about one week ago, there has been a drop in the number of cases reported.

Questioned about the likelihood of typhoid cases which have not been reported, Dr. Chin said this was possible. He pointed out that very often doctors in private practice who are required to report all cases of infectious diseases to the health authorities fail to comply with this regulation.

In addition, the CMO noted that some persons who have high fever - the main symptom of typhoid - fail to seek health care. He assured the GAN that drugs needed for the treatment of typhoid were available locally.

Meanwhile, sample tests have revealed that water being used by residents between Patentia and Hubu on the West Coast, Demerara is contaminated. Dr. Chin explained that water from individual wells in the area will be tested to get to the source responsible for the cases of typhoid in that area.

According to the CMO, the deliberate breaking of water pipes in areas of low water pressure could have contributed to the incidence of typhoid on the West Coast, Demerara.

He appealed to persons to refrain from breaking water pipes, stating that once these pipes are broken the likelihood of the water becoming contaminated is increased.

Dr. Chin also stressed the need for persons to practise good personal hygiene. He advised that as further precautionary measures vegetables should be properly washed before cooking and rinking water should be boiled for a few minutes.

MALARIA OUTBREAK--The spread of a malaria outbreak in areas of the North West District is causing great alarm among settlers. A correspondent reported that more than a half of the families in the Aruan river and Hotoquai in Upper Aruka have someone suffering from malaria. In this wet season, he said, breeding grounds for mosquitoes are numerous. "For a long time now there was no spraying by the Malaria Eradication Programme Department, and for a longer period still no medicated salt has been available to the population," the correspondent stated. [Text] [Georgetown MIRROR in English 5 Aug 84 p 3]

SUPPLIES OF BLOOD, PLASMA TO BE CENTRALIZED AT RED CROSS

Hong Kong SOUTH CHINA MORNING POST in English 26 Jul 84 p 11

[Text]

The production of blood components will be centralised after the Hongkong Red Cross Blood Transfusion Service takes over the service in phases from October.

The acting Director of Medical and Health Services, Dr Rudy Khoo, said the provision will then meet the needs of all hospitals.

Dr Khoo, replying to questions from Dr Henrietta Ip, said there was an adequate provision of fresh frozen plasma and cryoprecipitate to meet the needs of all Government, Government-assisted and private hospitals.

However, the provision of platelets met only 50 to 60 per cent of the needs of these hospitals.

But, he added, it was expected that all requests for blood components would be met after the transfusion service had taken over their production.

At present, Queen Elizabeth Hospital and the Sai Ying Pun Institute of Pathology are responsible for producing these blood components, he said.

The blood banks at Queen Mary, Queen Elizabeth and Princess Margaret hospitals are open 24 hours a day so that blood components can be issued to the three types of hospitals upon request, even during non-office hours, he said.

Doctors can also call on these hospitals for the blood products in case of emergencies, he added.

"After the blood transfusion service has taken over the manufacture and distribution of blood components, there will be a night clerk at the blood transfusion service to receive any requests and this will function as a hotline," Dr Khoo said.

HEPATITIS IMMUNIZATION—A special advisory committee has been set up to map out the most cost-effective strategy of immunisation against Hepatitis B, it was learned yesterday. The Acting Director of Medical and Health Services, Dr Rudy Khoo, revealed the formation of the new body in a written reply to a question from a member, Dr Henrietta Ip. He said the committee consisted of experts from the government and the two universities. Apart from advising the government on the strategy of immunisation, the committee would identify the high-risk groups which should receive priority for vaccination. Dr Khoo said the Hepatitis B vaccine had not been used in government and government—subvented hospitals for patients requiring haemodialysis. At its last meeting, he said, the committee had decided that the vaccination of haemodialysis patients should be further studied in the light of local eipdemiological data. [Text] [Hong Kong HONG KONG STANDARD in English 3 Aug 84 p 2]

JAUNDICE IN GUJARAT--Jaundice Toll (TOINS): The killer hepatitis-B has taken a toll of 766 people in Gujarat from January this year to July-end, according to the state health minister, Mr. Manoharsinhji Jadeja. As many as 12,000 cases were reported during the same period from Ahmedabad, Junagadh, Baroda and Panchamahals districts, where disease was widespread. The minister in Gandhinagar on Tuesday said that the intensity of disease was now gradually declining all over the state. He said that as many as 447 cases were reported from Ahmedabad oity in June, of which 56 proved fatal. However, in July, 345 cases were reported and 47 proved fatal. Similarly, in Baroda, as many as 682 cases were registered in June and 17 succumbed to the disease. However, the number declined to 340 in July and only nine cases proved fatal. [Text] [Bombay THE TIMES OF INDIA in English 9 Aug 84 p 15]

MALARIA IN TRIPURA—Agartala, Aug. 9. Malaria raging in virulent form in Tripura's North district has claimed a toll of 43 lives in the past fortnight, official sources said here today. Sources said most of the deaths had occurred in Kailashahar sub-division of North district.—PTI. [Text] [Madras THE HINDU in English 10 Aug 84 p 7]

CSO: 5450/0099

MALARIA ERADICATION DRIVE IN EAST KALIMANTAN

Jakarta ANTARA NEWS BULLETIN in English 10 Aug 84

[Text]

Samarinda, Aug. 10 (ANTARA). - East Kalimantan provincial health service receives Rp. 108.8 million in the 1984/85 fiscal year for malaria eradication in East Kalimantan's border areas with Serawak and Sabah (East Malaysia), as well as in its transmigration areas and interior.

Out of this funds Rp.8,493,000 will be utilized for malaria eradication, Rp.21,798,500 for treatment and surveys and Rp.79,500,000 for the fight against mosquitoes through sprayings.

The malaria eradication program will be an integrated effort to improve the health degree of the population in the border and transmigration areas as well as in East Kalimantan's interior, the disease eradication section chief of the East Kalimantan provincial health service, doctor Hamid Harun, told ANTARA here Thursday.

He further said that malaria cases recorded in this province were 1,003 in 1980, 2,908 in 1981, 2,431 in 1982 and only 942 in 1983.

The Gradication of malaria is East Ralimantan's border areas will be carried out in Nunukan, Kerayan, Lubis, Pujungan, Kayan Ilir, Long Apari, Long Pahangai and Long Bagun districts, he continued.

He went on to explain that in the 1984/85 fiscal year funds were also made available for the fight against dengue fever (Rp.12.8 million) and for the survey and treatment of elephantiasis (Rp.13.6 million). An additional Rp.10 million is also made available for research work on insects, such as mosquitoes, and the diseases they may convey, he added.

Data, obtained by ANTARA from sources at the Bast Kaliman tan governor's office, showed that during Pelita III (third five-year plan, 1979-1984) East Kalimantan had 2,260 physicians and paramedics, while at the end of Pelita II only 1,530.

There are at present 14 government and nine private hospitals in East Kalimantan.

SEMINAR DISCUSSES CHILD IMMUNIZATION PROGRAM

Blantyre DAILY TIMES in English 19 Jul 84 p 2

[Text]

CHILD immunisation against six of the world's killer deseases will be intensified in Machinga and Zomba districts in the next twelve months, a Ministry of Health official based at Zomba General Hospital disclosed at Chilema United Church Lay Training Centre on Tuesday.

He said officials of the Ministry of Health, dealing with mother and child health (MCH) programmes in the two districts and traditional birth attendants, will discuss the issue during the three-day joint annual MCH seminar for Machinga and Zomba which opened at Chilema Lay Training centre.

He said the MCH programme in Malaŵi is a sixpronged war against killer and crippling diseases of diptheria, tetanus, tuberculosis, polio, measles and whopping cough.

The Chilema seminar, the first joint exercise for the two districts, is being attended by 80 officials of the Ministry of Health working in Zomba and Machinga, traditional birth attendants and local leaders.

Other objectives to be achieved by the seminar were to find ways of effectively dealing with childhood diseases, especially diarrhoea, to re-enforce measures for improving mother and child health and to promote primary health care and education.

He said the seminar would discuss ways of utilising MCH resources, especially at nutrition and child spacing clinics. It would also enable participants to function as an effective and efficient team—against the killer diseases.

The Ministry of Health official said that every MCH worker should aim at achieving the programme's objectives.

The acceptable way of achieving these objectives, he said, "is by ensuring that every child that comes to underfives clinics is ummunised against the six target diseases".

He said such annual seminars lay guidelines for MCH activities for the coming year and reviewed achievements and problems noticed in the preceding twelve months. — Mana

ANTI-BILHARZIA EFFORTS—An appeal to people suffering from bilharzia to report to their nearest hospital for treatment has been made by the Ministry of Health. A medical specialist leading a three—man bilharzia control team in Nsanje district this week said the ministry was fighting an all—out war against the disease wherever it occurred. Bilharzia victims would lead better lives and enjoy better health if they were treated, he said. The team is examining and treating schoolchildren in the district to assess the extent of the disease. The specialist said examinations at two schools showed that more children in rural villages contracted bilharzia than those in urban areas. (Mana) [Text] [Blantyre MALAWI NEWS in English 4-10 Aug 84 p 1]

SOLDIERS REPORTEDLY SAFE FROM MALARIA

Cape Town THE CAPE TIMES in English 14 Aug 84 p 11

[Text]

SOLDIERS serving in South West Africa/Namibia and Angola are not about to be struck down in droves by a new resistant strain of mosquito announced in the latest edition of the South African Medical Journal.

A spokeswoman for the Defence Force's South African Medical Service said yesterday that the new strain was "nothing to be worried about", as adequate measures had been taken to control it.

In fact, she added, the SAMS had welcomed the SAMJ article "because we have people demobing all the time and going all over the country, and medical practitioners might not be aware of the new strain.

"If they know what to

"If they know what to look out for, we won't have any problems".

The spokeswoman confirmed that a new strain of mosquito, Plasmodium

falciparum, which had made its appearance in the operational area, showed "a measure of resistance" to standard anti-malaria drugs, and that two soldiers had contracted the disease.

However, she added, "it has been identified and is easy to treat", and the SADF had had no further cases.

Dr Margaret Isaacson. the SAMS malaria expert, had said the moderate degree of resistance did not appear to indicate a need to depart from currentlyreceived treatment.

The SADF strictly enforces prophylactic pill-taking among soldiers serving in malarial areas, but problems are sometimes encountered when service personnel who have returned to their homes after a spell in such an area forget or neglect to take their weekly dose for the next month.

TREATMENT-RESISTANT MALARIA DISCOVERED--JOHANNESBURG, 13 Aug--A deadly strain of treatment-resistant malaria, which first emerged in South America and South-East Asia about 20 years ago, has been discovered in northern Namibia (South-West Africa) and southern Angola, the South African Medical Journal reported today. One South African soldier had died from the disease and three others were ill, it said. The strain "P falciprum" is the most dangerous of the four known types of malaria, striking quickly with progress in a few hours from fever to coma and fits and then death. The strain reached East Africa in 1979 and has been moving slowly southwards down the eastern seaboard of the continent but it had not previously been recorded west of Mozambique, the Medical Journal reported. [Text] [Rangoon THE WORKING PEOPLE'S DAILY in English 15 Aug 84 p 7]

SPENT ON VACCINES—THE Kaduna government has spent more than N500,000 within the past six months on the purchase of vaccines for the immunisation of children and adults against various communicable diseases, the State Military Governor, Air Commodore Usman Mu'azu, has said. In a speech reac on his behalf recently at a meeting of the state branch of the Nigerian Medical Association by Mr Musa Yerima, the state's Commissioner for Health, the governor said that about 200,000 children had benefitted from the immunisation scheme. Air Commodore Mu'azu said that the government had been regularly providing money for the purchase of drugs and hospital equipment but expressed regret that the recent price increases and importation problems were hampering their availability. [Text] [Enugu DAILY STAR in English 16 Aug 84 p 12]

1,300 CHILDREN DIE DAILY-THE rate of infant mortality in the country now stands at 1,300 children daily. This has been traced to poor drinking water diarrhoea, tuberculosis, measles and whooping cough. This was disclosed by the representative of the United Nations Children's Education Fund (UNICEF), Mr Richard Reid, when he paid a courtesy call on the Cross River State Military Governor, Lt-Col Dan Archibong. [Excerpt] [Enugu DAILY STAR in English 12 Jul 84 p 8]

BLACK MARKET VACCINATION CARDS--THE scarcity of the international certificates of vaccination, popularly known as yellow card, is threatening this year's Hajj airlift operations scheduled to begin next Sunday, August 12. This is because Saudi Arabian Consulate officials do not issue visas to any intending pilgrim without a duly signed yellow card. Intending pilgrims storming the Kano Medical Centre along Murtala Muhammed Way, Kano, were only vaccinated and asked to return a few days later for the certificate of vaccination. the yellow card has become a hotly sought after document having found its way into the black market. Sunday Triumph reporters who visited the premises of the vaccination centre, interviewed some intending pilgrims who confirmed that the yellow card was being sold secretly by some unscruplous persons at prices ranging from N20-N50 depending on how desperate an intending pilgrim was. Contacted for his comments on the role played by his office, the Senior Health Superintendent at the medical centre, complained that they had not received the yellow cards from the Ministry of Health for distribution to the intending pilgrims. He, however, confirmed that individuals have been coming with blank new yellow cards to his office for official stamp, but said the pilgrims had refused to disclose how they got them. [Text] [By Salisu A. Bichi and Murtala Abdullahi] [Kano SUNDAY TRIUMPH in English 5 Aug 84 p 1]

GASTROENTERITIS DEATHS--THE killer disease, gastroenteritis, has killed about 100 persons in Gusau and Talata Mafara local government areas of Sokoto State. Last year, the disease, which inflames the stomach and intestine membrances, claimed the lives of more than 150 in Kaura Namoda Local Government area of the state. Gusau town and its environs suffered heavier casualties from the disease whose symptoms were vomiting and diarrhoea, like cholera. The Sokoto State Commissioner for Health, Mrs. Fatima Balaraba Ibrahim, confirmed the story but said she was not sure of the number of those who had died as a result of the disease. She said 22 persons suffering from the disease were on admission at Gusau General Hospital by the weekend. She said treatment centres had been opened at Talata Mafara and environs. The commissioner said the situation was not as serious as what happened at Kaura Namoda where about 200 people died last year. She said a team of officials from the ministry were working hard to stop the spread of the disease. Mrs. Ibrahim said the danger signals were more often known after the team might have returned to Sokoto and they had to go back. [Text] [By Ibrahim Salihu] [Kaduna NEW NIGERIAN in English 25 Jul 84 p 16]

'SCHISTOSOMIASIS' ABEOKUTA—A disease known as "schistomiasis" has hit primary and secondary schools in Abeokuta, capital of Ogun State. This was made known on Thursday in Abeokuta by the State Commissioner for Health, Mr Deinde Ogunji. According to him, the disease effected the passing of blood after urinating. The disease, also known as "bilharziasis," was detected among students in primary and secondary schools in Ogbe, Abeokuta. Mr Ogunji explained that the pupils were discovered to have contacted the disease after bathing in River Sokori. The river flows through Ogbe area of the town. Medical treatment, he stated, was now being administered on the children found to have the disease, and the treatment would be a continuous one. The commissioner further said that plans were underway on proper treatment of the stream in order to prevent further spread of the disease. Meanwhile, Mr Ogunji appealed to parents and teachers to help in educating the pupils on the matter and prevent them from swimming or bathing in rivers. [Text] [Lagos DAILY TIMES in English 23 Jun 84 p 11]

CHOLERA VACCINE—Nigeria is endowed with adequate man-power and technical expertise to produce cholera vaccines locally, a university lecturer has said. Professor A.N. Njoku-Obi of the department of Medical Microbiology College of Medicine, University of Nigeria, Enugu Campus, made the declaration in a paper he presented at the just concluded symposium on "human vaccine development and production in Nigeria," at the University of Jos. The lecturer who produced the first vaccine which sparked off some controversy at Yaba some years back said Nigeria had for long been involved in animal vaccines production and most of the techniques acquired in the exercise could form a basis for the take-off. [Text] [Lagos DAILY TIMES in English 3 Jul 84 p 24]

WHO EXPERTS TO STUDY MYSTERY DISEASE IN PUNJAB DISTRICT

Karachi DAWN in English 27 Aug 84 p 8

[Text]

RAWALPINDI, Aug 26: Foreign medical experts may soon visit Pakistan to find out the causes of a mysterious disease which has so far claimed over 18 lives in district Talla Gang.

The Chief of National Institute of Health, Maj-Gen M.I. Burny, told 'Dawn' today that the World Health Organisation had been requested to send experts, who would survey the entire affected area to gather samples for analysis.

He said the result of samples collected earlier had revealed that the mysterious disease was neither caused by a powerful virus nor was it a bacterial infection as had earlier been thought.

He said symptoms of the disease had convinced doctors and researchers that malnutrition was one of its causes, but however the disease remained a mystery.

Dr Burny said that during his visit to Talla Gang he was shocked to see the environment in which the people of the area had to live.

Samples of water and other eatables collected from the area were found contaminated, he said.

The mysterious disease which was detected a month back in Tala Gang has now spread to a number of towns and villages in the area.

According to information reaching here, very little has been done to prevent the spread of the disease. People, terrified by the sudden attack of the disease, have begun to move to other places.

The Federal Health Minister Dr Basharat Jazbi, when contacted for information about the precautionary measures the Government has taken against the disease said he could not say anything as he was presiding over a meeting to discuss some very important issues.

MYSTERY DISEASE SAID STILL RAGING

Karachi DAWN in English 28 Aug 84 p 3

[Text]

ISLAMABAD, Aug. 27: The month-old fatal disease, which had broken out in tehsil Talagang, district Attock, and had caused death of at least 13 persons, could not be brought fully under control so far, in spite of extensive preventive measures taken by the Punjab Health Department.

A medical expert, after a visit to the affected areas, told APP here on Sunday that it was essential to determine the exact nature of the disease, so that a proper cure could be made to eliminate totally the symptoms of the disease.

Maj.-Gen. M.I. Burni, Executive Director, National Institute of Health told APP that a special team has been sent to the area to investigate and identify the disease on a scientific basis. He said the Institute was also trying to get the services of the expert from the Geneva-based W.H.O. to find out the real causes of the disease. He, however, ruled out the possibility of virus or any other infection as the cause.

Gen. Burni was of the view that it

might be a neuro toxin.

Victims

under-nourished children, having and supply of clean drinking water. little power of resistance or those living in unhygienic conditions and belonging to the poorer sections of the society.

Gen. Burni further said that one of the most affected villages, Sagher, had 10,000 people and most of them belonged to lowincome group. In this village, he added, 21 children were afflicted by this disease during the last three weeks and three of them had since

Dr. Javed Rasool, Deputy Director, Health Services, Punbjab, when contacted, said that 13 doctors, with necessary paramedical staff, have been deputed in the area to provide emergency medical aid to the peeple.

some mobile dispensaries were ease has so far claimed about 18 operating day and night to treat lives and it spread over about 30 disease-stricken persons at the villages of the area. -APP

earliest.

He said some anti-infection steps have also been taken, including improvement in the hygienic condi-He said it mostly affected the tions in the area, like regular spray

75 patients

Dr. Rasool said that a person suffering from thos disease needs immediate treatment to save his life. The patient usually feels vomitting, diarrhoea, fits and severe abdominal pain. He advised the public, residing in the area, to refrain from using rotten food and unboiled water.

Dr. Mohammad Bashir Chohan, doctor incharge, Civil Hospital, Talagang, told APP that, in all, 75 patients mostly children, had suffered from this disease and 13 of them died. He said the worstaffected villages included Malakwal, Sagher, Lawa, Dawal, Jatla and Narangi.

Meanwhile, unofficial sources in He said seven ambulances and Talagang said that the mystery dis-

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XINHUA REPORT ON IMPROVED PUBLIC HEALTH SINCE 1949

OW130841 Beijing XINHUA in English 0816 GMT 13 Sep 84

["PRC: Chinese Medical Statistics" — XINHUA headline]

[Text] Beijing, September 13 (XINHUA) -- China now has 196,000 medical and health institutions, 53.4 times the number in 1949.

Hospital beds total 2.11 million, 26.4 times, and medical workers over 3.25 million, 6.4 times, the 1949 figure. Per thousand people there are on average 2.07 hospital beds, 3.19 health workers and 1.33 doctors.

In minority areas, where medical treatment used to be extremely poor, medical and health institutions have expanded from 361 in 1949 to 28,800, and professional medical workers from 3,530 to over 387,000.

In cities up to 1983 there were over 6,500 hospitals, 869,000 hospital beds and over 1.57 million professional medical workers. This excludes neighborhood hospitals, antiepidemic stations, Red Cross organizations and clinics in factories, schools and government departments.

China's 2,100 counties have 2,340 general hospitals, 2,084 epidemic prevention stations and 1,879 maternity and child care stations. The 50,000 townships have between them 56,000 health centers, and 87 percent of villages have set up their own clinics. In rural areas there are over 1.24 million hospital beds, nearly 1.7 million professional medical workers, 1.28 million barefoot doctors and 1.9 million medical aids.

Incidence of various diseases have dropped considerably. Cholera, plague, small pox, relapsing fever, typhus, black fever and venereal diseases have been wiped out or under control since the founding of the People's Republic in 1949.

The Chinese Communist Party Central Committee has organized leading bodies for the prevention and elimination of endemic diseases and snail fever. 212 districts and 1,139 counties of 28 provinces, municipalities and autonomous regions have set up such organizations.

The incidence of snail fever has dropped from 11 million to one million last year. Of 348 counties which had snail fever, 247 have eradicated or drastically reduced it. That of malaria, once 30 million, was some 1.37 million in 1983. Endemic diseases like endemic goiter, Keshan disease and Kaschin-Beck disease have also been controlled to some degree.

Infectious and parasitic diseases have been replaced as the main causes of death by cerebrovascular disease, heart disease and cancer.

China's 301 medical research institutes, with their 22,000 research workers, have won over 1,400 Ministry of Public Health prizes. In treating extensive burns, choriocarcinoma and rejoining severed limbs, China has attained advanced world levels.

In 1983 there were 11 medical colleges with 140,000 students, compared to 22 with 15,000 students in 1949. Medical colleges introduced master's degrees and doctorates in 1981. There are now 520 medical secondary schools with 163,000 students. There were only 15,000 students in 1949. In the 35 years since liberation China has turned out 497,000 medical college graduates, more than 3,800 post-graduates and 1.08 million medical secondary school graduates. Over 1,300 county medical schools have been training rural paramedics.

Medical academic exchanges with foreign countries and with world health organizations have expanded. The WHO now has 43 cooperating centers in China.

Acupuncture training centers in Beijing, Shanghai and Nanjing have trained over 800 acupuncturists for over 100 countries and areas.

CONTAGIOUS, PARASITIC DISEASE SYMPOSIUM SUMMARY

Beijing ZHONGHUA NEIKE ZAZHI [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 2, 20 Feb 84 pp 112-114

[Report by Zhang Naizheng [1728 0035 1513]: "Summary of 2d National Symposium on Contagious and Parasitic Diseases," in abridged form]

[Text] The 2d national symposium of the Institute of Contagious and Parasitic Diseases, Chinese Medical Sciences Conference, was held from the 23d to the 28th of November 1983 in Zhengzhou, with altogether more than 600 regular and nonvoting delegates attending. Medical workers from clinical medicine, preventative medicine, epidemiology, virology, microbiology, parasitology, immunology, medical examination and other fields participated in the conference. In the course of the congress, Minister Cui Yueli [1508 2588 3680] of the central Ministry of Public Health, and Hunan Provincial Party Committee first secretary Comrade Liu Jie [0491 2638], gave addresses. Altogether, the conference received nearly 1,500 papers. The conferees reviewed and exchanged information on achievements gained nationally in contagious and parasitic disease research since the establishment of the institute in 1980, emphasizing discussion of viral hepatitis, hemorrhagic fever and certain parasitic diseases. They looked to see where we lag behind the advanced international level, reviewed the weak links in the work and inquired into the direction of future efforts. In addition, they revised the 1978 "Program for the Prevention and Treatment of Viral Hepatitis" and passed the summary of the current conference. The conference adhered to the policy of "letting a hundred schools of thought contend" and was very lively.

I. Viral Hepatitis

That viral hepatitis is highly injurious is a fact already known to everyone. This session of the conference reported the rather long series of future results that will follow for those who test positive for hepatitis—B surface antigen and for sufferers of acute hepatitis—B. Of these, the proportion that develop chronic—latent and chronic—active hepatitis are 62.2 percent and 2.7 percent, respectively, and the proportion that develop cirrhosis, chronic—severe hepatitis and hepatoma are 4.2 percent, 2.6 percent and 0.75 percent, respectively. In the past few years, national research into viral hepatitis has achieved remarkable results. The outstanding showings are in the following areas:

1. Epidemiological Conditions

Under a unified organization and plan, every province, city and autonomous region in the entire nation, with the exception of Taiwan, has conducted a comprehensive epidemiological survey of hepatitis-B. This has clarified the general epidemiological conditions and pattern of viral hepatitis in China and has defined its different characteristics in different localities and among different nationalities. For example, in some localities the rate of infection is comparatively low, as in Shanxi, and in other localities it is comparatively high, as in Jiangxi. In the majority of localities, the rate of positive tests for hepatitis-B surface antigen rises gradually after age 1 and reaches its highest peak at between 3 to 5 years of age. However, in Xizang the rate of infection continues to rise with age and does not reach its highest peak until 50 to 60 years of age. These survey results have all made major contributions to furthering epidemiological hepatitis research, including researches into environmental and lifestyle factors and into human genetic predisposition. At this conference there was a small number of papers that touched upon the discussion of differentiating the HLA pattern from viral hepatitis and the value of further reserach in this area. This year's survey made clear that non-A, non-B hepatitis represents approximately 16 percent of the total number of viral hepatitis cases in children and 20 to 30 percent of those in adults. We must await further research into the epidemiological conditions and pattern of non-A, non-B hepatitis.

2. Channels of Transmission

Although we already know a great deal about the channels of viral hepatitis transmission, we nevertheless are still not completely clear on the exact particulars that constitute the major pattern of hepatitis-B transmission under China's specific conditions. In the past few years, research into maternal-infant transmission has provided important data. Infants born to mothers with positive surface antigen for hepatitis-B show an infection rate as high as 51.8 to 85.3 percent within their first year. Nowadays. when eugenics and one child per family are stressed, this cannot help but be of concern to people. The common opinion is that intimate prenatal and postpartum contact is the primary pattern of maternal-infant transmission. There not only is "vertical" maternal-infant transmission; after the mother is infected with hepatitis-B there is a hepatitis-B family clustering phenomenon that is extremely prevalent in China. This may help to explain how the mother, through some certain channel (for example, it may be menstrual blood contamination), becomes the primary transmitter of hepatitis-B. Research into the relationship of acupuncture to hepatitis-B transmission is continuing to attract attention. One study compared a group of patients that had been under continuous acupuncture treatment for a year or more with a group of patients with no history of acupuncture treatment. Ages and sexes of the groups were identical, and it was demonstrated that the former group had a 49.1 percent rate of hepatitis-B infection, whereas the latter's rate was 18 percent -- a clear difference. In the acupuncture group, 22.1 percent had a history of acute hepatitis, whereas the rate in the contrasted group was 6.6 percent. In addition, 21 nm of globular

particles [particulate antigens] can be detected in the liquid from the gauze pad used to prepare needles. Although this research still has imperfections, it nevertheless indicates at least a policy of one needle and one tube per person or one person and one use per needle, and this is something we should support and put into practice.

There were a few papers on post-transfusion hepatitis at the conference. On the one hand they were able to confirm that if blood donors are merely tested for hepatitis—B surface antigen and are not tested for core antibodies, the blood recipients still have a certain chance of infection with hepatitis—B. On the other hand, they also confirmed that most post-transfusion hepatitis is non—A, non—B hepatitis, though its reported percentage varies. These researches into transmission channels provide a significant scientific basis for future development of prevention work. Thoroughgoing research into transmission channels, along with the integration of research in lifestyles, environmental factors and genetic predisposition already mentioned, can further explain the obvious phenomenon of hepatitis—B family clustering in China. Of the many different factors that effect the rate of infection, those that are primary and those that are secondary are possibly not entirely uniform in different localities and different groups of people.

Diagnostic Techniques

In the few years since the Hangzhou conference, we have continued on the domestic front to establish several different, more sensitive, and better methods of checking out the hepatitis-A antigen/antibody system, the hepatitis-B surface and core antigen/antibody systems and the e-antigen/ antibody system. In checking out antibodies we can assay not only IgG antibodies, but also IgM antibodies, with consequent benefits to making early diagnoses. In addition to immunoassay methods previously established, such as immune electron microscopy, convection immunoelectrophoresis, passive hemagglutination, reverse passive hemagglutination and immune adherence, we have also already developed radioimmunoassay, enzyme-linked immunoadsorption and solid radioimmunoassay. Recently, some units have also developed monoclonal antibody checks of hepatitis-B surface antigens and a few other antigens and antibodies. These methods have raised the sensitivity of hepatitis checks. The recently completed central evaluation of identical reagents in different units all over the country confirmed that work results in this area already approach the advanced international level. At the same time, it revealed the inadequacies in our work and contributed to future improvements. The prominent problems at the moment are, on the one hand, the remaining inability to manufacture these reagents in large quantities, and, on the other hand, the discovery of their broader clinical applications. Consequently, the problem demanding prompt solution lies in the limitations that these factors place on further increases in the level of hepatitis prevention and treatment and on scientific research.

4. Pathology

Research work that we have launched in different areas in the past few years, including research into the pathological transformations of severe hepatitis and so forth, is already sufficient to enable us to add to the points of pathological diagnosis in this revision of the "Program for the Prevention and Treament of Viral Hepatitis," and this is a very important advance. It was the opinion of the conference that, on the one hand, it is entirely possible to implement those hepatic paracentesis examinations and follow-ups that we should carry out in order to make definite diagnoses of cases that are difficult to diagnose reliably, and at the same time to ensure a definite and purposeful scientific level of research work. On the other hand, we should not arbitrarily employ hepatic paracenteses where they are generally unnecessary. For example, it is not always necessary to carry out hepatic paracentesis examinations in cases of severe hepatitis where the diagnosis is already clear and treatments do not differ greatly. Although hepatic paracentesis has certain limitations, it can still be regarded as an important, valuable diagnostic and scientific research method. It is only necessary to choose one's cases properly and make prior reasonable and full preparations for hepatic paracentesis to be safe. The pathological diagnosis of chronic-latent and chronic-active hepatitis is still not entirely without difficulty in atypcial cases. Furthermore, there is a question as to whether or not it is possible for one to transform into the other. Both of these problems merit further research.

5. Pathogenesis

In the past few years a good deal of research has been conducted on hepatitis-B pathogenesis from an immunological angle. The emphasis has been on research into T-cell subsets and their functions, specific autoantibodies, the toxic actions of lymph cells, and the actions of immune complexes. Looking at the state of similar research work at home and abroad, the results are not entirely consistent. There are many phenomena that are still inexplicable, immunological research methods are still somewhat limited and the characteristics of viruses themselves are still not entirely clear. Consequently, research in pathogenesis remains an extremely arduous task. In the future, when checking out the immunologic functions of hepatitis-B patients, we should coordinate as far as possible with hepatic immunopathology and carry out comparative research in order to further understand the relationship of the hepatitis immune reaction target antigen, the type of immune reaction and the nature of pathological changes in haptatis. Research into the immunologic functions of hepatitis-B patients should also coordiate with regulated and controlled immunotherapy, and performance trials should be conducted in order to further clarify hepatitis-B pathogenesis and explore the route to immunotherapy.

6. Prevention

After the Hangzhou conference, different units continued to prepare surfaceantigen vaccines from blood. A few units prepared hepatitis-B immunoglobulins of different titers. The effects of these products were very good, they produced no adverse rections and, when used to block maternal-infant transmission, they achieved very good results. These results have already approached the advanced international level. The problem facing us is how to create the conditions under which we may prepare the vaccine in large quantities. In 1984 we intend to produce enough vaccine to be shared among 200,000 people altogether. In order to obtain the best results we should plan well for its applications and use it particularly to protect infants and children. As for the protection of other susceptible people, we should handle this on the basis of potential severity.

7. Treatment

Although this conference reported quite good results with hepatitis sensitivity to lowered aminopherase levels, as well as the possibility of good results with branch amino acids and glucagon (and insulin in the treatment of severe hepatitis), generally speaking, as far as Western medicine is concerned, a breakthrough has yet to be made. Interferon and antiviral agents remain to be developed. Those experimental treatments already begun in the past few years, such as thymosin, specific immunity ribonucleic acids and so forth, are awaiting thorough study and at present it is still difficult to draw any definite conclusions. The assessment standards for curative effects and the points for attention laid down in the Hangzhou conference "Program for the Prevention and Treament of Viral Hepatitis," such as that the observation of cases not be too short and that the course of illness not be too long, that there must be random sampling or double-blind methods of comparison, that there should be long-term follow-up observation after treatment and so forth, have evidently not yet been widely adopted. Those double-blind comparison treatment and observation studies already begun by the current conference are worthy of encouragement. These principles should continue to be upheld. At the next conference it is to be hoped that we will see improvement in the level of clinical treatment research. Regardless of whether the treatment results are positive or negative, they are all significant.

8. The Virus

In 1982 Alexander had already successfully isolated hepatitis—A virus from representative human kidney cells. In 1983 there was further success in isolating the virus from human diploid lung cells. The problems facing us are the still unstable nature and low titer of viral reproduction. However, the prospects for a breakthrough and the possibility for then developing a vaccine still exist. DAN [as published] molecular hybridization techniques on hepatitis—B virus have already been developed in some units and new advanced techniques have been established in molecular biological and pathogenesis research into the hepatitis—B virus. Just as with all other contagious diseases, success in isolating the pathogen, and the understanding and control achieved thereby in discovering the function of that pathogen itself, are crucial links to making a breakthrough in the prevention and treatment of viral hepatitis. The conference was of the opinion that we should make great efforts and be persistent and dauntless in conducting work in this area to bring about results.

II. Epidemic Hemorrhagic Fever and Other Contagious Diseases

Since 1981, when we isolated the virus of epidemic hemorrhagic fever on the domestic front, etiological research has made significant progress and opened up pathways of epidemiological investigation and future vaccine preparation.

The problem facing us is that the pathogenesis of this disease is still not entirely clear. There are some Chinese scholars who feel that it is an immune-complex disease and therefore that early immunosuppression treatment may achieve good results. However, there are some areas in which they have been unable as yet to achieve uniform results. In the wake of a thorough understanding of the epidemic hemorrhagic fever virus there will certainly come new knowledge and development in pathogenesis. Xindean [1800 1779 1344] and arabonic cytidine treatments both await thorough research in order to determine their curative effects. The conference was of the opinion that we should consider formulating a program for the prevention and treatment of epidemic hemorrhagic fever. It is to be hoped that this work will be completed at the next conference or other suitable meeting.

The range of contagious diseases is extensive; it was impossible for this conference to conduct a thorough discussion of each one. Worthy of notice are some new contagious diseases that have already received some study outside of China but that have just been discovered here. For example, an instance of serotype-6 (? army sickness [juntuan bing 6511 0957 4016]) that was reported at this conference is one of these. Group surveys show the serotype-5 and serotype-6 (?pulmonary army sickness [shifeixing 0841 5151 1840 juntuan bing]) bacillus soluble antigen and those with indirect hemagglutination antibodies are 21.5 percent and 3.7 percent, respectively. This explains why this disease may have long been present in China and yet gone unrecognized. The northeastern region and Anhui reported epidemic diarrhea in adults: it is estimated that more than 100,000 people have been stricken. Characteristic of this illness are an extensive scale of infection, a concentration of the infection within 2 to 3 months, a higher incidence in winter and spring and patients that are generally young and vigorous. This epidemic diarrhea, which is of an as-yet-unknown origin and which is believed to be possibly the product of a new virus or to arise in adults from a rotiform virus, needs to be thoroughly studied. Another situation worthy of note is the change that has already occurred or is in the process of occurring in certain contagious diseases. Taking bacillary dysentery as an example, for many years past the Sonne bacillus was predominant, but from 1982 to 1983, according to reports from Henan and Yunnan provinces, Shiga's type-I bacillus represented 41.4 percent and 62.4 percent, respectively, and certain other provinces have similar situations. This could be a new trend in the epidemiology of Shiga's bacillary dysentery that has arisen recently in China, and it should be closely watched. Similarly, looking at the results of hospital blood cultures, gram-positive bacteria represent more than half of the positive results in aerobic cultures, with a predominance of Escherichia coli; in anaerobic cultures approximately 2 percent are positive, primarily Bacteroides fragilis and Peptostreptococcus. This demonstrates the tendency of bacterial groups to change after widespread . use of antibiotics. At present, the paucity of development in anaerobic trials and the insufficient recognition by clinical workers of anaerobic bacterial infection await improvements in China.

III. Parasitic Disease

China's achievements in schistosomiasis prevention and treatment, particularly the progress we have achieved since the widespread application of Chinese-made (? Praziquantel [bikuitong 0070 081A 7904]) for the prevention and treatment of schistosomiasis, are also outstanding on the world stage. Currently, the 5 provinces and municipalities of Guangxi, Guangdong, Fujian, Shanghai and Jiangsu, and more than 200 counties and cities have basically eradicated schistosomiasis. The number of patients cured and the area cleared of snails amounts approximately to more than two-thirds of the nation's original infection and infestation figures. Although schistosomiasis is even more complicated than kala-azar, based on perseverence in treating all the sick and all those infected with the disease (including domestic animals), it is not impossible ultimately to eradicate schistosomiasis. Right now the important thing is to research further simple and reliable diagnostic methods in order to facilitate the diagnosis and treatment of all the sick and those infected with the disease. Besides the indirect hemagglutination and (? egg-encircling [huanluan 3883 0607]) trials and other effective methods of the past, the report on the isolation and initial clinical applications of a urea-soluble antigen to the parasite's eggs (JEU) and its further isolate, JECI-3, drew everyone's attention and is worth continued thorough research. (? Praziquantel [bikuitong]) has a very good curative effect against the clonorchis (Oriental liver) fluke and also is fairly effective against cysticercosis. Although (? Praziquantel [bikuitong]) is not as effective against the lung fluke, it still has a fairly good curative effect. The experimental animal research and clinical observations made in Xinjiang on hydatosis may also play a positive role, as this therapy and course of treatment await further research and in time may attain even better curative effects. The task facing us is to provide enough (bikuitong) to areas where these diseases are epidemic and to make clinical workers familiar with its use.

Research reported at the conference on serological diagnosis of amoebic dysentery pointed out that in some rural Chinese areas the rate of infection with amoebic dysentery may be nearly 12 percent or so, illustrating that amoebic dysentery is still a major, widely epidemic parasitic disease. Amoebic enzymatic immunoadsorption trials are highly specific and highly sensitive, and are particularly of major diagnostic significance in cases of amoebic liver abscess. There have been repeated reports in the past here on toxoplasmosis, but people have generally not become familiar with them. The conference report utilized different serological methods to conduct group surveys, and the results revealed that as many as 20 percent or more may have antibodies to toxoplasmosis. Although only a small portion of these may have clinical symptoms, nevertheless the rate of infection is high and should be taken seriously in order to avoid missed diagnoses.

In summary, compared either with conditions previous to the establishment of new China or with conditions existing when this institute was set up three years ago, this vast, populous country—a country that had seriously deficient health conditions prior to liberation—has achieved tremendous success in the prevention and treatment of contagious and parasitic diseases.

and in many respects it has attained or approached the advanced international level. If we are to raise Chinese work in the prevention and treatment of contagious and parasitic diseases to a new level, the tasks confronting us are still formidable. The conference is confident that, in the wake of continuing improvements in the overall national political and economic situation, we will certainly achieve even greater success in the prevention and treatment of contagious and parasitic diseases and in scientific research work. The conference appealed to all workers concerned with contagious and parasitic diseases to work hard for the good of the country, together and with one heart, with each making his own positive contribution.

12510

INCIDENCE OF MALARIA DROPS ON HAINAN ISLAND

Haikou HAINAN RIBAO in Chinese 8 Apr 84 p 1

[Article: "Hainan Achieves Obvious Successes in Malaria Prevention--The Annual Malaria Incidence Rate Has Dropped From 93.4 Percent Before Liberation to 0.2 Percent Last Year"]

[Text] A reporter for this paper learned from the recently convened 30 Year Awards Meeting for Malaria Prevention Work in the Hainan Region that in the past 30 years, all areas of the region have achieved enormous successes by resolutely adhering to the policy of "prevention as the key", and by developing a patriotic public health mass movement centered on malaria prevention. The annual malaria incidence rate throughout the region has dropped from 93.4 percent just after Liberation to 0.2 percent last year.

Malaria prevention work has gone through three stages since Liberation. The first stage was from 1953 to 1957 and primarily involved the development of investigation and research to gain a full understanding of the epidemic laws of malaria, as well as trial research on prevention and exploration of prevention methods. The second stage was from 1958 to 1978. This period dealt specifically with the special characteristics of malaria epidemics, adopted integrated prevention measures to eliminate sources and media of infection, and developed a large scale mass malaria prevention movement. By 1962, the region had basically eradicated malaria-carrying small Anopheles mosquitoes. The third stage was from 1979 to the present. The focus was placed on the prevention of infection media and the treatment of infectious sources. In addition, in the area of administration of the mobile population, they strengthened the monitoring and day-to-day management of malaria, and made strong attacks on key scientific research topics in dealing with the remaining small Anopheles mosquitoes, prevention of resistant strains of malaria, and other areas. This raised the level of prevention work. The population in regions with a high incidence of malaria has dropped to 7.7 percent of the total population and is limited to minority nationality settlements in mountainous regions.

In order to speed up the control and elimination of malaria, Hainan has established the Experimental Malaria Prevention Zone at Maoyang in Qiongzhong County. The zone has explored a set of new methods for malaria prevention, and the traditional practice of giving medicine to everyone to prevent the

recurrence of malaria has been completely stopped. This greatly conserved human, material and financial resources and strengthened the achievements in malaria prevention. In 1981, with Maoyang as the center, they established the "Wuzhi Shan Integrated Malaria Prevention Experiment Zone", which was expanded to include seven areas and a state farm in three counties. After the implementation of several technical measures, the Experiment Zone quickly controlled epidemics of resistant malaria. The Experimental Zone convened a "Study Group on Malaria Prevention Planning" and provided a fieldwork site for the World Health Organization in 1982. In addition, it provided a work site for research on prevention for scientific research departments in China. In recent years, scientific research departments concerned with malaria prevention in the region have carried out clinical experiments using Artemesia apiacea factor preparations for resistant malaria. The experiments have proven that it has excellent treatment effectiveness, and they have received awards from the State Science Commission, the Ministry of Public Health, the Guangdong Province Public Health Department and other departments. Moreover, in the process of carrying out investigations and research on resistant malaria, scientific research people have developed a simple method for investigating resistance that has fairly quickly delineated the distributional characteristics of resistant strains in malaria regions. This has formed an additional foundation for the prevention of resistant malaria.

12539

CASES OF EPIDEMIC HEMORRHAGIC FEVER REPORTED

Shijiazhuang HEBEI RIBAO in Chinese 21 Apr 84 p 4

[Article by Zi Weilian [6088 4850 1670] of the Hebei Public Health Department: "Adopt Measures To Prevent Epidemic Hemorrhagic Fever"]

[Text] Three cases of epidemic hemorrhagic fever occurred recently in Shijiazhuang City, and two persons died.

Epidemic hemorrhagic fever is also called hemorrhagic renal nephritis. It is an acute viral infectious disease for which no method of treatment is very effective, and which has a high fatality rate. The cause of death in those with the disease is the exhaustion of kidney function. This type of virus is found primarily in black-striped Ji [1213] rats (living mainly in moist wild habitats), large domestic rats and other rodents. The infection is spread to people through the excrement of the rodents or by parasitic mites. What deserves attention is that the disease has occurred or reached epidemic proportions in recent years in the adjacent Shandong, Henan, Shanxi, and Liaoning Provinces and in Tianjing Municipality. Hebei is now faced with a situation of epidemic hemorrhagic fever epidemics in regions surrounding it on three sides. It will be entirely possible for epidemic hemorrhagic fever to roll across Hebei if the scale of prevention is not actively strengthened.

The primary means of preventing epidemic hemorrhagic fever is to annihilate all rodents. For this reason, it is proposed that:

1. Under the leadership of all levels of government, public health, agricultural and other departments in all cities and rural areas in Hebei should cooperate closely to mobilize the broad masses to carry out several attacks to eliminate rodents this year, and there should be a war to annihilate rodents during the spring. The elimination of rodents requires unified activities. Experiments by the Hebei Plague Prevention Institute in Zhuoxian County have proven that if 80 percent of the current rodent population can be eliminated at one time, then the danger from rodents can be controlled for that year. It would be impossible for rodent density to increase significantly within the space of one year.

- 2. It is best to use the safe and effective rodenticide "warfarin" during the large-scale effort to eliminate rodents. It is non-toxic to humans and livestock, and it does have secondary toxicity for natural enemies like cats or yellow weasels that might eat the dead rats.
- 3. Eliminate the raising of chickens in urban areas in an organized and gradual manner. The density of mice and flies in buildings where chickens are raised is 22 times greater than in buildings where chickens are not raised. The raising of chickens in urban areas is uncivilized and unsanitary. Cities in all areas can order that the raising of chickens be eliminated. We should quickly adopt measures to do good prevention work against epidemic hemorrhagic fever. We must not wait for an outbreak of the disease and then summarize our experiences from negative examples.

12539

PROGRESS MADE IN VACCINE FOR HEPATITIS

Beijing JIANKANG BAO in Chinese 1 May 84 p 1

[Article: "China Makes New Progress in Research on Type B Hepatitis Vaccine-Success in Producing Large Amounts of Type B Liver Virus Surface Antigens in Mammalian Cells"]

[Text] Under the leadership of Professor Zhu Jiming [2612 2478 2482] and the guidance of Deputy Director Ren Guifang [0117 6311 2455], scientific and technical personnel at the Viral Genetics Office of the Chinese Preventive Medicine Center's Virology Research Institute have obtained good results in utilizing genetic engineering techniques to produce large amounts of Type B hepatitis virus surface antigens.

Genetic engineering techniques can be used in medicine to adopt similar engineering design methods for using gene recombination techniques to turn microorganisms and animal or plant cells into "biochemical factories" for the production of large amounts of certain medicines or biochemical products needed by mankind.

Since being entrusted with breakthrough research on genetically engineered Type B hepatitis virus vaccines by the State Science Commission in 1982, the Viral Genetics Laboratory of the Virology Research Institute has used cell transfer from Lu [4845] monkey kidneys as a model. They adopted a system for transformation and implanted Type B hepatitis virus genes to develop a cell that can convey Type B hepatitis virus surface antigens. In addition, they used Type B hepatitis virus recombinant DNA plasmids to design and transform Type B hepatitis virus recombinant plasmids, and formed B-16 and other cell systems after the transformation. High production has been obtained in the cells of mice.

The Type B hepatitis virus surface antigen secreted by the B-16 cell system has already reached advanced world levels. Specialists feel that work in this area is an important advance in genetic engineering research on Type B hepatitis in China, and is of great significance for hepatitis prevention work in our country.

12539

MEASURES TO PREVENT VIRAL HEPATITIS

Beijing GUANGMING RIBAO in Chinese 11 May 84 p 3

[Article by Wang Juntao [3076 0133 7290]: "The Current Situation and Countermeasures in Viral Hepatitis"]

[Excerpt] According to investigations, China has an estimated 27 million people with Type B hepatitis, and there are even more people who are carrying Type B hepatitis surface antigen or antibodies. Every year, 10 to 20 percent of the cases change from acute Type B hepatitis to chronic hepatitis. It takes a long time to recover from chronic hepatitis. Cirrhosis of the liver occurs in 4.2 percent of the cases, recurrent hepatitis in 2.6 percent of the cases, and liver cancer in 0.75 percent of the cases. Research on the prevention of viral hepatitis has already become a key national project for scientific breakthroughs, and the state is extremely concerned about it.

Apart from the public health and administration measures mentioned above, the development of vaccines is a major aspect of Type B hepatitis prevention. Small batches of gamma globulin vaccine are now being produced, and the highly effective immunoglobulin is also being produced in small amounts. They are used to prevent the infection of infants by mothers with positive surface antigen. Preliminary investigations have shown very good results, but there are still some problems that require further study. Globulin vaccines come from difficult sources. The question of whether or not they can bring forth acquired-characteristics steresis syndrome also requires consideration. The direction for the future is to prepare synthetic polypeptide vaccine or genetically-engineered Type B hepatitis vaccine.

The treatment of Type B hepatitis is still a question that requires resolution. There are no highly effective medicines at present to eliminate the virus. People are now developing research on several aspects. There are some medicines to fight the virus, such as interferon and antinuclear acid factor metabolic medicines such as arabonic glandular glucoside. It has also been proven that some Chinese and Western medicines can stimulate immunity in laboratory animals, but there has been no thorough research on their effectiveness in humans, especially in those suffering from hepatitis. Moreover, we also should study how to restore damaged liver function and avoid cirrhosis. The treatment of chronic hepatitis is also an urgent task.

The treatment of hepatitis requires the development of pharmaceutical manufacturing. There are difficult tasks in this area, and they require concern and assistance from all areas.

Non-A and non-B Type hepatitis occurs in about 20 to 30 percent of all cases of viral hepatitis. The nature of non-A and non-B Type hepatitis viruses is still unclear, and there is a lack of special diagnostic methods. This is a topic that is now being studied diligently.

12539

RENMIN RIBAO ON ENDEMIC DISEASE PREVENTION

HK070656 Beijing RENMIN RIBAO in Chinese 4 Sep 84 p 1

["Facts and Figures" column: "Prevent and Cure Endemic Diseases, Bring Benefits to Thousands of People"]

[Text] Since the founding of the country, great achievements have been made in the prevention and cure of endemic diseases. The causes of several endemic diseases have basically been clarified. Their incidence has dropped and they can no longer spread freely. In 1964, the death rate from Keshan disease dropped from over 80 percent before liberation to less than 20 percent. In 1965, the incidence of the Kaschin-Beck disease dropped from 62.5 percent in the 1905's to 9.6 percent, and the incidence of endemic goiter has also dropped by a big margin.

Since the 3d Plenary Session of the 11th CPC Central Committee, the party and government have further strengthened leadership over the prevention and cure of endemic diseases. At present endemic disease prevention and cure leading groups and offices have been set up in 1,139 counties and 212 prefectures of 28 provinces, municipalities, and regions.

The government has allocated large sums of money for the prevention and cure of endemic diseases. According to incomplete statistics, the government spent more than 23.2 million yuan on 8 provinces alone from 1981 to 1983. For many years the government and local authorities have spent much money on adding iodine to table salt for the prevention and cure of the endemic goiter, on operations for endemic goiter patients, on using sodium selenite for the prevention and cure of the Kaschin-Beck and Keshan diseases, and on projects of water treatment with fluoride.

Our country's achievements in the prevention and cure of endemic diseases and also manifested in basically controlling the plague since the 1950's, and 22 epidemic counties have reached relevant requirements in wiping out rats. In the prevention and cure of endemic goiter, not only the law governing iodine in water and endemic goiter has been made clear but the idea that endemic goiter is "a disease caused by shortage of iodine" has also been put forward, which is acknowledged by international academic circles. The manual operation of adding iodine to table salt has been replaced by mechanical operations so that 96.8 percent of the people in the affected areas can use table salt with

additional iodine. This has effectively curbed the number of new patients. A total of more than 20 million patients have been cured and this disease has basically been controlled in 512 counties. The whole of Shaanxi, Tianjin, Heilongjiang, Hebei and Liaoning have reached the control indexes formulated by the government. Regarding the Kaschin-Beck disease, scientists of our country were the first in putting forward the notion of biochemical supersession characteristics and active affected areas. After 3 years' observation and investigation of the Kaschin-Beck disease in Yongshou County, Shaanxi Province, results in using sodium selenite to prevent and cure this disease has been further verified.

At the third international conference on the role of the Selenium in medicine and biology held in Beijing in May 1984, scientists of the Keshan Disease Research Group of the Health Institute of the China Prevention Medical Center and of the Keshan Disease Research Office of the Xian Medical Institute were awarded the "Schwartz" prize. China is taking the lead in the study of the prevention and cure of the Keshan disease. The incidence of this disease is rapidly dropping and the cure for it is effective. According to statistics from 11 northern provinces and regions where the Keshan disease is found, the incidence and death rate of the actue and subacute types of this disease respectively dropped to 1.81 per 100,000 and 0.41 per 100,000 in 1982.

WATER SUPPLY, SANITATION WORKSHOP--Changsha, 20 Aug (XINHUA)--Seventy scientists from 13 countries and five international organizations have attended an international workshop on the design and application of handpumps, water supply and sanitation over the past week in Changsha, Hunan Province. They have discussed and exchanged experience on research into the use, maintenance and production of handpumps. The workshop, which ends tomorrow, is sponsored by the Chinese Ministry of Machinebuilding Industry, the United Nations Development Program and the World Bank. The UN has designated the 1980s the "international drinking water supply and sanitation decade." In April last year, the Chinese Government agreed with the UN Development Program and the World Bank to undertake experiments on handpumps to supply drinking water and irrigation pumps to water fields. [Text] [OW200930 Beijing XINHUA in English 0914 GMT 20 Aug 84]

HEALTH MINISTRY URGES DIPHTHERIA, POLIO SHOTS

Manila BULLETIN TODAY in English 20 Aug 84 p 5

[Text]

The Ministry of Health urged parents yesterday who have unvaccinated children to take them to health centers, clinics or hospitals for inoculation against diphtheria and polio.

The ministry's health intelligence service (HIS) issued the advice after submitting a report to Health Minister Jesus Azurin, indicating an upsurge of diphtheria and polio in Metro Manila and neighboring areas.

Unvaccinated children would be continually exposed to the risk of contracting the two vicious diseases, it said.

Dr. Antonio Faraon, HIS epidemiologist, said that vaccination is still the most effective prevention against the highly communicable diseases, which mostly infect children below six years.

Faraon said that a child inoculated with the right dosage of diphtheria toxoid and polio vaccine would enable him to acquire a certain immunity against these diseases.

Diphtheria toxoid is injected into the skin while the polio vaccine is taken orally or through the mouth. The toxoid is included in the so-called "DPT vaccine formula" which is usually used for combined inculation against diphtheria, tetanus and pertussis (whooping cough.)

Health intelligence chief Julio Valera said that there were 20 diphtheria cases admitted into the San Lazaro Hospital (SLH) for the week ending Aug. 11, or three cases higher than the previous week's 17.

Of the 20 cases, seven were from Manila, four from Caloocan City, three from Pasay City and one each from Pasig, Makati, San Juan and Mandaluyong in Metro Manila and one each from Rizal and Nueva Ecija.

On polio, Varela said that there were eight cases admitted into the SLH for the week ending Aug. 11, or three cases higher than previous week's five.

Of the eight polio cases, three were from Manila and one each from Quezon and Caloocan cities and the remaining three cases from Rizal, Bulacan and Laguna.

In Manila, city health officer Evangeline Suva reported seven diphtheria cases admitted into the SLH and one case reported from a health center.

She said the eight cases were higher than the average weekly seven diphtheria cases registered in Manila for the past five years. (PNA)

EIGHT DIE IN BICOL MEASLES OUTBREAK

Manila BULLETIN TODAY in English 26 Aug 84 p 4

[Article by Roy Sinfuego]

[Text] Naga City--Eight chidren have reportedly died from measles in the isolated barangay of Agit-it- Vinzon, Camarines Norte, in the past two weeks.

The measles epidemic has reportedly afflicted 30 percent of the children in barangay Agit-it.

Known as "tipdas" among Bicolanos, measles is still an illness dreaded by barrio folk, despite the availability of drugs.

Reports said Agit-it is an isolated barangay that even local Ministry of Health (MOH) personnel could hardly visit the place to attend the sick children and conduct an immunization drive.

Public school pupils have reportedly stopped coming to classes to avoid contracting the communicable disease.

The three female school teachers of the barangay public school have also gone on leave, reports said.

A certain Mr Bando, principal-teacher of Agit-it public school, announced the number of casualties and appealed for assistance in Mang Amin Urbano's "Tawag Aksiyon Agad" program on radio station DZMD in Daet.

Latest reports said Camarines Norte provincial health officer Ernesto Santiago has responded to the appeal and sent provincial health office personnel to the barangay.

RABIES EPIDEMIC FADING--DURBAN. -- This year's rabies outbreak in Natal was worse than the massive 1980 epidemic which claimed the lives of more than 30 people, according to the State veterinary department. Dr Bill Posthumus, head of veterinary services for the province, disclosed this week that 83 cases had been confirmed to date this year compared with 67 by the end of August in 1980. Although more animals have been affected, only five humans-all from KwaZulu--had died of the disease this year. The killer virus appeared to be fading, but he added there were several "possibilities still in the pipeline." One of the suspected cases came from Rossburgh near the city centre. "We have had many come back negative lately," Dr Posthumus said. Nine cases of rabies have been confirmed this month-equal to the number for the same period last year. However, during August 1980, 24 animals were rabid. Of the animals found to be rabid this month, five were dogs, three were cattle and one, spotted at Glencoe on August 1, was a meerkat. Dr Posthumus said nine bovine cases had been found since January and the affected animals had "more than likely" been attacked by rabid dogs. [Text] [Johannesburg THE CITIZEN in English 23 Aug 84 p 21]

DEATHS FROM AIDS--FIFTEEN persons--all male homosexuals--have so far died of Acquired Immune Deficiency Syndrome (AIDS) in Trinidad and Tobago. And because of the seriousness of the problem, the Ministry of Health recently sent a team to United States to study the treatment of cases. Up to March this year AIDS caused the death of 12 persons and Dr. Bisram Bahabir, head of the Caribbean Medical Centre (CMC), warned about the severity of the problem in an address to life underwriters. A project involving 100 persons who were screened to ascertain if they had the disease--the cause of which has since been found--has been abandoned, one of the reasons being the lack of funds. But a source said those wishing to be screened can have this done on a voluntary basis at the CMC's facilities, Queen's Park East, Port-of-Spain. Pointing out that it was not possible to give a figure of persons suffering from AIDS at this time, the source added: "What I do know is that like in other countries the incidence of AIDS is on the increase in Trinidad but I will not say that was the main reason why the Bartholomew team was despatched to the US." The majority of the 15 fatalities was from north Trinidad. In Trinidad and Tobago, AIDS was first discovered in May last year and an official source described the figure as an indication of the extent of sexual promiscuity in the society. [Excerpts] [Port-of-Spain TRINIDAD GUARDIAN in English 5 Sep 84 p 11

CSO: 5440/026

GOVERNMENT PLANS VACCINATION DRIVE TO ELIMINATE MEASLES

London THE DAILY TELEGRAPH in English 1 Aug 84 p 8

[Article by David Fletcher]

[Text] A DRIVE to increase the number of vaccinations against measles, with the aim of eliminating the disease altogether by the end of the century, was announced yesterday by Mr John Patten, Junior Health Minister.

He is writing to all health authorities asking them to try to immunise 90 per cent of children before they are two years old compared with the present figure of 59 per cent.

He hopes to achieve this target by 1990.

Mr Patten warned that measles could be a fatal disease. "In 1983 over 100,000 children were reported as having measles. Many of these children will have had troublesome or serious complications.

"A total of 16 died and many suffered permanent damage. I want to reduce this toll

After 1st Birthday

The Department's recommendation is that in the absence of contra-indications all children should be immunised against measles after their first birthday.

A spokesman or the D H S S said adverse reactions could occasionally result from measles vaccinations.

He stressed that the risk of complications was far greater to unvaccinated children and that the risk of adverse reactions from the vaccine itself was extremely rare.

In a separate statement yesterday the D H S S gave its continued backing to immunisation against whooping cough, a disease which has been known to cause brain damage in a small number of children. Its medical experts said the benefits of the vaccine far out-weighed the risks and whooping cough vaccination should continued to be recommended.

CSO: 5440/024

INCREASE OF SYPHILIS IN VIETNAM NOTED

Hanoi Y HOC VIET NAM in Vietnamese Jun 84 p 13

[Article by Nguyen Thi Dao and Nguyen Thanh: "On 49 Congenital Syphilis Cases at the Venereal Disease Institute"]

[Excerpt] In recent years the number of venereal disease cases has clearly increased, not only in the capitalist countries but also in the socialist countries.

Syphilis, one of the most harmful diseases, has also clearly increased at places and at times. According to OMS data, first and second term syphilis has increased alarmingly in nearly all countries in comparison to the post-World War II period.

In Vietnam, the syphilis situation has also undergone many transformations in the two regions.

In the south, the date of direct participation by U.S. troops in the fighting in the south (1965) was also the date of the formation of the Venereal Disease Prevention Center. During that period south Vientam had the highest venereal disease rate of any Southeast Asian country.

2. In the north, during the period of temporary French occupation syphilis became widespread in the cities and towns and around the military posts. After the restoration of peace (1954) we took positive steps against venereal disease, so during a 10-year period (1955-1964) the syphilis situation underwent a good transformation en route to conrol and elimination. But in 1965, when the fierce warfare spread and Vietnamese returned to their country from Thailand and the Paracel Islands, the syphilis rate began to increase again in the north.

After the liberation of the south there were no longer impediments to travel between the two regions. Syphilis was also free to circulate throughout the nation. Especially, at present syphilis is no longer concentrated in the cities but has spread all over, even to remote rural areas. Syphilis is encountered not only in the venereal disease department but in nearly all specialized departments.

With the increase in syphilis congenital syphilis has also increased. According to statistics of Dr Nguyen Van Chinh of the Hanoi Venereal Disease Clinic, during the pre-liberation period (1975) congenital syphilis cases accounted for fewer than one percent of all syphilis cases.

According to statistics of the venereal disease sector, in 1977 and 1978 syphilis was involved in 4.5 percent of the child-birth cases and congenital syphilis was involved in 1.25 percent of the cases. That is worrisome, for our impression is that the rate could be even higher.

In the advanced countries, there may be many cases of syphilis but few or no cases of congenital syphilis. For example, in Poland in 1977 there were 17 congenital syphilis cases for every 100,000 people and in 1978 there were 25 congenital syphilis cases for every 100,000 people. It is believed that allowing a baby to be born with congenital syphilis is a major deficiency on the part of doctors, especially obstreticians, for if the disease is detected early and the mother is promptly treated, the baby will not be diseased but will be healthy.

5616

CSO: 4209/4450

EFFORTS TO COMBAT HEMORRHAGIC FEVER URGED

Hanoi HANOI MOI in Vietnamese 11 Jul 84 p 4

[Article by Dr Pham Nang Cuong: "Measures To Prevent and Fight Hemorrhagic Fever"]

[Text] In June of this year the Public Health Service reported to the Anti-Hemorrahagic Fever Committee of the Ministry of Public Health on the hemorrhagic fever situation in Hanoi during the first 6 months of 1984.

According to the report, the type of mosquito and mosquito larve (Aedes aegypti) that transmit hemorrhagic fever exceeded alarm levels three times. None of the patients suspected of having hemorrhagic fever were confirmed as actually having it. According to the report of Bui Quy Xiem (MS), the high point of that disease usually occurs in Hanoi in September and October every year.

On the basis of the above-mentioned report the Anti-Hemorrhagic Fever Committee decided that it is not yet necessary to spray insecticides to kill mosquitos in Hanoi. The committee recommended the strengthening of all folk methods of eliminating mosquitoes and larvae, such as raising fish, cleaning out water reservoirs once a week, eliminating stagnant rain water around houses, scooping up mosquito larvae so that they can be directly killed, and practicing general sanitation and using mosquito nets to prevent mosquitos from getting into houses and biting people.

The Anti-Hemorrhagic Fever Committee also decided to give certificates of commendation and monetary bonuses to subwards and villages which do a good job, i.e. which reduce the mosquito and larvae index, discover the first case and, if someone contracts hemorrhagic fever, rapidly extinguish the outbreak and prevent it from spreading and becoming and epidemic.

5616

MENINGITIS CHECKED—MEDICAL authorities in Choma have launched an immunisation exercise to prevent the spread of meningitis which has claimed four lives, medical superintendent Dr Om Jhamb said yesterday. Vaccination was carried out in the Masuku area where six of the 17 patients came from. The victims were admitted to Choma general hospital last week. "We are containing the situation. There is no need to panic because out of the 17 people admitted last week, 12 have been discharged and the rest are responding well to treatment," Dr Jhamb said. Most of the meningitis cases were from Kalomo district. "What we are doing is to vaccinate family members of the victims including their neighbours to stop the disease from spreading." [Text] [Lusaka TIMES OF ZAMBIA in English 27 Aug 84 p 7]

VACCINES RUN OUT--HEALTH officers in Mufulira have run out of cholera and small pox vaccines with which to complete the immunisation exercise of the 300 Zambians expelled from Zaire last week. The deportees were being vaccinated against various killer diseases before being allowed to join their relatives. Health officers who confirmed the shortage of cholera and small pox vaccines said this was holding up the completion of the immunisation exercise. They said, however, that drugs were expected from Ndola. [Excerpt] [Lusaka ZAMBIA DAILY MAIL in English 29 Aug 84 p 1]

SUSPECTED RABIES--Faridpur, Aug 9--As many as 35 persons and 50 cattleheads of villages Shialdanga, Kashiadanga, Chomorkhali, Bharoha and Jujkhola under Taia upazila were seriously bitten by mad jackals during the last 48 hours. The victims were admitted into Islamkati Cheritable Dispensary. They are feared to be attacked with hydrophobia. Anti-hydrophobia vaccine is not available in the local market, it is learnt. [Text] [Dhaka THE NEW NATION in English 12 Aug 84 p 8]

CATTLE DISEASE EPIDEMIC--Netrakona, Aug 11--Cattle disease has broken out in an epidemic form in some parts of Netrakona and Barhatta upazilas. Hundreds of cattleheads died of the disease. The most affected areas are Netrakona, Biseeura, Boushee and Roypur. It may be mentioned here that scarcity of medicine is prevailing in the markets of these areas. [Text] [Dhaka THE NEW NATION in English 13 Aug 84 p 2]

cso: 5450/0095

DOGS VACCINATED--SOME 800 dogs were vaccinated against rabies at various places in Nsanje from July 5 to 14, the rabies control officer in the south told Mana yesterday. He said the dogs were vaccinated at Marka, Mbenje, Ndamera and Nsanje boma. During the campaign, 24 dogs were shot dead in a drive to control rabies in the areas. The vaccination team has since moved to Bangula in the norhtern part of the district to continue its drive. [Text] [Blantyre DAILY TIMES in English 18 Jul 84 p 1]

GOVERNMENT ALLOCATES FUNDS FOR ANTI-RINDERPEST CAMPAIGN
Kaduna NEW NIGERIAN in English 16 Aug 84 p 13
[Text]

THE Federal Government has given three million Naira for the 1984/85 rinderpest eradication campaign which the Head of State, Major General Muhammadu Buhari is expected to launch in October.

The Director of the Federal Livestock Department in Lagos, Dr. Kelsey David-West said at the fourth preparatory meeting of the National Co-ordinating Committee on Rinderpest Control in Kaduna yesterday that one million Naira out of the money would be given to National Veterinary Research Institute, (NVRI), Vom to step up production of vaccines against inderpest, which last year killed 40,000 cattle.

The rest of the money, he said, would be for procurement of additional campaign input and payment of allowances of inoculators.

Dr. David-West observed that the resurgence of rinderpest in Africa was due to failure of most governments to implement the measures taken during the 1962-66 international campaign.

To ensure the success of the campaign this time, he said, the police and traditional rulers had been co-opted into the campaign strategy. They were expected to "report promptly any illegal cattle or drugs trade, illegal movement of cattle, suspected infected cattle, malpractices by inoculators, quacks and veterinary impersonators."

Dr. S. B. Oluokun, national co-ordinator of the campaign, said in the heat of the rinderpest epidemic last year, the

Federal Government allocated 3.5 million Naira to the campaign for the eradication of the cattle disease while state governments provided personal, logistic and material support, he said.

Dr. Oluokun said that 6,438,338 heads of cattle were hit by the disease from which 39,375 died. With 11,350,812 heads vaccinated that year, he said, the epidemic had been "seriously checked."

Dr. Oluokun said the Institute of Veterinary Research, Vom had been given sufficient assistance to be able to produce enough rinderpest vaccines, adding that the shortages of the past years would soon be over.

He implored Chief Veterinary officers in the states to work together in order to make the campaign succeed, and expressed the belief that a permanent solution lay in established grazing settlements, up-dated veterinary laws and their strict enforcement.

In a speech read by Commissioner for Agriculture, Livestock

and Forest Resources, Dr. D.S. Tafida, the Governor of Kaduna State, Air Commodore Usman Mu'azu said that the migration of cattle herders from the north to the south when the rains end threatens another widespread of epidemic.

He implored the co-ordinating committee to draw up strategies based on the experiences of the past years which would lead to the total eradication of rinderpest

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in the country.

The governor believed that the disease which had been eliminated in the 70s resurfaced last year because the political climate before December last year divided the people and adversely affected the control measures taken against the diseases.

He disclosed that his administration since January this year had imported 400,000 doses of vaccine, inoculated 452,000 heads of cattle against rinderpest and another 109,723 against contagious Bovine Pleuropneumonia.

RINDERPEST KILLS CATTLE--THE Federal Government last year donated 21,000 doses of vaccine and a sum of N13,000 to the Ondo State Government for the control of rinderpest diseases in the state, the Commissioner for Agriculture, Dr Ade Akintuyi, said at Infu, near Ado Akiti in Ondo. Speaking at the launching of the National Rinderpest Campaign, Dr Akintuyi said that a total of 20,741 heads of cattle had so far been vaccinated against the disease. He said that about 650 cattle died of the disease in Akoko North Local Government Area last year and that the state government released N25,000 for its control. Dr Akintuyi equated the campaign with waging a war against hunger in the livestock sector. He said that veterinary services in the state were expanding following the establishment of clinics, sub-clinics and laboratories at all local government headquarters, towns and villages. [Text] [Enugu DAILY STAR in English 30 Jul 84 p 3]

GUANGXI CONFERENCE DISCUSSES RABIES PROBLEM

HK250352 Nanning Guangxi Regional Service in Mandarin 1130 GMT 24 Aug 84

[Excerpt] A regional meeting on rapidly controlling rabies, which concluded yesterday, pointed out: Rabies has become a social problem in the region. We must take effective measures to rapidly put it under control.

This meeting was held in Nanning from 20 to 23 August. Over 140 representatives of public health, veterinary, and public security departments in the region, prefectures, cities, and some counties attended. Comrade Wu Keqing, vice chairman of the regional people's government, made a speech. He said: There has been an increase in the keeping of dogs by the masses in recent years, and there is a serious rabies incidence, threatening the people's health and life and affecting their production and livelihood. The regional government therefore issued a notice on 7 August on strengthening the control of dogs in urban and rural areas, clearly stipulating the various demands for controlling rabies and the responsibilities of each department. Everyone must seriously implement this notice.

Wu Keqing stressed: Areas where the keeping of dogs is prohibited must solve the problem within a deadline. It is necessary to take resolute action before National Day to completely wipe out privately-raised dogs in urban areas, county towns, inner suburbs, and large factory and mining areas, together with villages where there have been cases of rabies within the past 5 years. Other places must meet the demands before next June. Remote mountain areas must complete the task no later than the end of next year.

RABIES UNDER CONTROL

Harare THE HERALD in English 25 Aug 84 p 3

[Text]

THERE have been 11 confirmed cases of rables in the Zvimba communal lands over the past 12 months, but the director of Veterinary Services, Dr Jimmy Thomson, says the outbreak has now been contained. "We are now on top of the situation," he said. Following the outbreak, the Department of Veterinary Services launched a vaccination campaign which covered 3 770 dogs in the area.

He said 16 000 dogs were vaccinated in the Lomagundi district since the beginning of the year. "In all this year we have done about 340 000 dogs which is an awful lot," said Dr Thompson. — Ziana.

MONGOOSE SPARKS RABIES ALERT

Harare THE SUNDAY MAIL in English 26 Aug 84 p 11 [Text]

> BULAWAYO. THE Department of Veterinary Services is to wage an all-out war against rables in and around Masvingo from tomorrow.

> The drive follows the discovery of a rabid mongoose on the out-akirts of Masvingo by

Masvingo by Masvingo by Masvingo provincial chief animal health inspector, Mr Chris Diedericks, about two weeks ago.

Mr Diedericks said "Since mongooses live in colonies it is possible the disease may have spread and if we still have affected mongooses they might come in contact with dogs that might pass the disease on to people."

He said the vetetinary staff would be visiting every home where there are dogs.

are dogs.

"Owners of dogs that have not been vaccinated will be prosecuted, and all dogs found not to have been vaccinated will be destroyed."

WIDESPREAD AREA OF PADDY ATTACKED BY RICE PESTS

Dhaka THE NEW NATION in English 16 Aug 84 p 2

[Text] Alamdanga, Aug 13--Aerial spray of insecticide has been started over the pamripoka affected paddy fields of Kushtia Sadar, Kumarkhali, Mirpur, Bheramara and Khoksa upazilas of Kushtia district, Alamdanga upazila of Chuadanga district and Meherpur Sadar and Gangni upazila of Meherpur district since Aug 9.

By this time about 15,000 acres of land have been blessed with aerial spray. Mention may be made here that about 73 thousand acres of paddy field of 12 upazilas of Kushtia, Chuadanga and Meherpur districts fell victim to the attack of a black coloured insect technically known as Rice Hispa (pamripoka) since July last.

Of the total affected areas 44 thousand acres have been controlled by 270 insect controlling squads of Agriculture Extension Department equipped with 70 power sprayers, 242 hand sprayers and 4180 pounds of insecticide under the guidance of block supervisors in cooperation with farmers, members and chairmen of union parishads. About 80 percent of the total affected areas of the aforesaid three district have been treated with insecticide and biological devices, and more areas are being brought under aerial spray, it is learnt.

Rupganj

Our Rupganj Correspondent adds: The planted Aman paddy over the vast tracts of lands here has been attacked here by Pamripoka in Barpa Rupshi, Gandorbapur, Gangagaon, Murapara Karanagap, Nageon, Bonshinagar, Uivabo, Masaba, Kandapara, Tarabo and Sutalara under Rupganj upazila.

It is felt here by all that antidotes are not taken immediately to combat the pest attack which likely will spread over the entire paddy fields and ultimately the target of Aman cultivation of this upazila will not be fulfilled, it is apprehended.

CSO: 5450/0096

GRASSHOPPERS ATTACK GRAIN CROPS IN SASKATCHEWAN, ALBERTA

Toronto THE GLOBE AND MAIL in English 20 Jul 84 p 8

[Article by Paul Grant]

[Text]

MOOSE JAW - A combination of grasshoppers, intense heat and almost no moisture is reducing some Saskatchewan and Alberta grain crops to the point where they may not be worth harvesting.

Little or no rain has fallen across the southern part of the province since early spring, daytime temperatures have been around 30 degrees Celsius for a few weeks and there is no relief in sight for the heat wave.

As a result, the grain crop has

grown slowly, if at all.

Compounding the problem is the fact that, while the grain crops suffer from intense heat and low moisture, those are ideal conditions for grasshoppers. The largest population of grasshoppers in more than 20 years has been munching through the weakened wheat fields for most of July.

"Some people have given up on their crops; they've just decided that they aren't worth saving," said Lloyd Harris, provincial pest control specialist with Saskatchewan Agricul-

ture.

Farmers are faced with the added expense of spraying insecticides to control the grasshoppers - even if the crop isn't worth saving - because, unless the adult hoppers are killed, they'll lay enough eggs to ensure an even worse infestation next year. But at an average cost of \$5 an acre, spraying is expensive and some farmers are ready to throw in the towel.

"I would suggest that some fellows are already at that stage," said Jim Graham, provincial agriculture representative for the Moose Jaw area. "There are still some farmers who are sparying the edges of the fields and trying to keep them out, but with the hoppers flying, you spray once, then a whole new batch flies in, so some fellows are beginning to feel that it's beyond hope."

The need for rain is critical now. If 10 centimetres or more fell in the next week, some of the crops would bounce back. And the cooler weather accompanying the rain would slow down the grasshoppers.

But for farmers like Bill Legge, who farms just south of Moose Jaw, it may already be too late. Some of his crop is so bad that even a good rain won't revive it.

"Some of these crops aren't going to come back. It isn't a paying proposition to spray for the grasshoppers because the crop isn't that good. But if you don't keep the grasshoppers down, what do you get next year?"

What you get is more grasshoppers. So even though Mr. Legge will be lucky to get half his usual yield, he's forced to spend the money on insecticides. And the crop growth is so slow that whatever grain there is may be too short to cut easily.

Southeast of Moose Jaw, near Drinkwater, Tom Mann's lentil crop is almost ready to harvest.

But the grasshoppers are busy devouring the disc-shaped beans almost as fast as they grow. When Mr. Mann harvests the crop, he expects to find a lot of grasshoppers mixed in with the beans.

"It should be full of them," he said with a resigned chuckle. But he is determined to get what he can from his lentil crop, and from his other crops of wheat

and rapeseed.

More than 174,000 square kilometres are being eaten by grasshoppers this year. That means more than 40 million acres. While the infestation in those acres ranges from light to very severe, all that cropland is at risk. And that amounts to all the land in production in the province, plus almost 15 million acres lying failow this year.

Further west, in the pastureland of southwestern Saskatchewan and southeastern Alberta, the problem is the same or worse. Growing conditions in the Lethbridge area are the worst in 65 years, according to scientists at the Agriculture Canada research station there.

CSO: 5420/3

TOMATO DISEASE DAMAGES 5 PERCENT OF ONTARIO CROP

Toronto THE TORONTO STAR in English 20 Jul 84 p B4

[Article by John Spears]

[Text]

Good news for tomato growers: A bacterial disease imported from the United States appears to have hit only 5 per cent of Ontario's tomato crop.

If had been feared that the bacterial canker could spread from field to field and wipe out a big part of Ontario's \$80 million tomato crop.

But Blair MacNeill, a plant pathologist at the University of Guelph, said this week that the disease hasn't spread from the seedlings originally imported bearing the disease.

The canker plugs the tomato plant's "plumbing system," preventing moisture and nutrients from flowing to the plant's leaves and fruit from its roots.

The disease appeared in Ontario this year for the first time in a decade. It was brought in on tomato seedlings from Georgia, MacNeill said.

Although as much as 30 per cent of

some farmers' tomato crops might be infected, the average across the province is about 5 per cent of the tomato acreage, he said.

Growers had been warned no; to take machinery from an infected field to a healthy area without d sinfecting the equipment first.

MacNeill said it will still be some time before the severity of the camage is known for crop insurance purposes.

Tomato growers have also been battling another bacterial disease, called tomato speck, for a number of years. The disease can kill the plant if it's severe, and it produces unsightly specks on the fruit so that it can't be sold fresh or for canning whole.

MacNeill said the speck problem seems to be moderate this year.

Researchers are working on lomato species with a high resistance to tomato speck.

CSO: 5420/3

SPRUCE BUDWORM OUTBREAK IN NEW ONTARIO 'SERIOUS'

Toronto THE GLOBE AND MAIL in English 3 Aug 84 p 11

[Article by Christie McLaren]

[Text]

Northwestern Ontario is suffering a serious outbreak of spruce budworm that could destroy thousands of hectares of marketable timber within the next few years, the Canadian Forestry Service says.

Governments and the forestry industry have little time to decide what to do about the ravaging caterpillars, Dr. Gordon Howse, head of the CFS insect and disease survey unit, said in an interview.

"The time frame in which to develop a plan of action is very narrow, I'm afraid a year or two at the most."

And although the Ontario Ministry of Natural Resources is under pressure from industry to take the route of quickest relief and spray insecticide, Dr. Howse and ministry officials are saying the answer is not that simple.

While spraying is not being ruled out, Government officials are leaning instead toward the more difficult, novel approach of creating a "budworm-proof" forest

The budworm attacks balsam fir and white spruce trees, which constitute 5 to 10 per cent of the boreal forest.

Since the infestation began in 1967, 100 million cubic metres of softwood have been destroyed in Northeastern and Northwestern Ontario, Dr. Howse said.

According to an industry spokesman, that amounts to a \$15.5-billion loss (in 1984 dollars) for the pulp and paper industry.

If harvested, the dead wood would have given the Crown \$3.20 in stumpage fees for every cubic metre.

The caterpillar is on the wane in the northeast, but it's peaking in the northwest, where 4.6 million hectares of forest are infested, Dr. Howse said.

All of the forests under licence to pulp and paper companies within 200 kilometres of Thunder Bay, Kenora, Dryden and Fort Frances are infested, he said.

"Certainly, it is serious," said R. B. Loughlan, secretary-manager of the Ontario Forest Industries Association. "The only answer possible that anybody can think of is a (insecticide) spray program."

But because it is impossible to spray all the infested areas, Mr. Loughlan said, the Natural Resources Ministry should make a list of high-priority timber stands for spray programs.

Spokesmen for three pulp and paper companies agree.

About half of the 450,000 hectares licenced to Great Lakes Forest Products Ltd. near Thunder Bay is infested, said Warren Moore, the company's manager of forestry operations.

A sudden explosion of the caterpillar population this spring took the industry by surprise, he said.

As a result, Great Lakes was alarmed when Natural Resources Minister Alan Pope abruptly reversed a decision made by his

staff last spring to spray insecticide on 6,000 hectares of heavily infested forest near Shebandowan Lake, 100 kilometres west of Thunder Bay.

"We're trying to salvage what we can of (the dead trees), but there will be a lot we can't get to in time," Mr. Moore said. "The only alternative, really, is to carry out a spray program."

George Garner, chief forester for Boise Cascade Canada Ltd. in Fort Frances, said 80 per cent of the balsam fir is dead on the company's 500,000-hectare licenced area between Fort Frances and Dryden.

More disturbing is the recent discovery of a heavy budworm infestation in a large area of black spruce 50 kilometres from Fort Frances, he said.

If the budworms start killing the spruce, which constitute 30 per cent of the harvest, insecticide will be necessary, Mr. Garner said.

Edgar Arundell, a spokesman for Abitibi-Price Inc. in Toronto, said dead trees left in the forest are a major safety and fire hazard. The public should be educated about the magnitude of the problem so that they understand the need for a limited spray program, he said.

Liberal MPP Patrick Reid, the party's natural resources critic,

said it appears that the Government has no clear program for controlling the budworms or for giving pulp and paper companies an incentive to harvest the dead balsam fir.

"In the short term," Mr. Reid said, "that which has been killed has to be harvested, and in the longer term, I think they have enough information that they should be doing some kind of controlled spraying."

But the answer, according to Dr. Howse and ministry officials,

is not that clear-cut.

"In some cases, industries blow things a little out of proportion at times," Bruce McGauley, supervisor of the ministry's pest

control section, said in an inter-

"The basic question is, is the loss of those spruce or fir trees of any real value?

"If it has no value, then you might as well let nature run its course in that area."

(Black spruce is more valuable than balsam fir or white spruce because its fibres are longer and it makes better-quality pulp and

paper.)

Mr. McGauley said the Govern-

ment has three options.

It can spray everything, which controls the pest but may also make repeated spraying necessary.

It can spray nothing and risk losing massive amounts of timber.

Or, in the short term, it can spray only the areas that have been deemed valuable for recreation, wildlife or timber. This is the option the ministry prefers.

In June, Mr. Pope told the Legislature he decided not to spray Great Lakes' Shebandowan Lake area because the company did not provide enough information about the value of the area.

Once the Government agrees to spray, it will do so only three times in the next five years, Mr. McGauley said. And in return, it is asking the companies to harvest more of the less-valuable balsam and white spruce.

He said companies have "some reservations" about the trade-off. They are getting no financial incentives to harvest the less-

valuable species.

All of this may change, however. Mr. McGauley said that in view of the severity of the budworm infestation in Northwestern Ontario, the ministry is reviewing its budworm strategy.

One of the approaches that may be considered is spraying on a larger scale in certain areas to contain the caterpillar popula-

tion.

However, Dr. Howse said, the fact remains that one of the best ways to check the spruce budworm is simply to leave it unchecked, allowing it to run its natural cycle, eating the trees until it literally runs out of food and starves.

"It's going to get worse before it gets better," he said.

CSO: 5420/4

PESTICIDES DEALERS WARNED AGAINST IRREGULARITIES

Karachi DAWN in English 5 Sep 84 Business Supplement p I

[Text]

HYDERABAD, Sept 4: Director-General, Agriculture, Sind, Mr Aftab Ahmed Khan, has warned the dealers of pesticides that action will be taken against those who are not putting name and price of pesticides clearly on the container.

The D-G paid a surprise visit to pesticides shops in Nawabshah district and said that any dealer found cheating farmers by selling outdated and incorrect pesticides will be severely dealt with.

He said the Government wanted to save crops at any cost and any mischief in this respect will not be tolerated.

He directed the field staff to be vigilant against trading of substandard agricultural chemicals with a warning of official action in event of any slackness.

The D-G suspended two field assistants on the spot and directed to initiate punitive action against an Agriculture Officer for failure in proper discharge of duties during his surprise visit to agriculture offices in Moro taluka.

The D-G also directed the Deputy Director, Agriculture, Nawabshah, to check the diaries of field assistants regularly and warned that any slackness in this connection will not go without punishment.

He also visited emergency centres and pesticides shops in Bandhi and Dour.

Mr Khan then visited Shahdadpur and held meeting with Maj. Kalim of NLC —APP

SALE OF SUB-STANDARD PESTICIDES DENIED

Karachi DAWN in English 5 Sep 84 Business Supplement p I

[Text]

KARACHI, Sept 4: The Pakistan Agricultural Pesticides Association (PAPA) has refuted allegations that outdated and substandard pesticides were being sold to farmers and has clarified that under the law only registered pesticides can be imported and

sold in the country.

A PAPA Press release said all Government appointed pesticide distributors, who are members of the Association, import and market only registered pesticides conforming to the international standards of quality whether imported in finished form OF locally formulated, and over 95 per cent of the total pesticide sales are through PAPA members.

It said PAPA members will not undermine the confidence of their customers by supplying inferior or sub-standard pesticides, particularly when they are exposed to cre-

dit supply risks.

"Under Agricultural Pesticides Ordinance, Government agencies have the authority to inspect and check the quality of the pesticides sold in the country and PAPA would welcome enforcement of such quality control measures," the release said.

"To meet the requirements of current spraying season large quantities of fresh and highly effective pesticides have been imported by PAPA distributors with the approval of Provincial Agriculture Departments and are being made available to the farmers.

According to PAPA, the Government is making all-out efforts to ensure that pesticides of best quality

with highest efficacy are imported and supplied to the farmers. Pesticides imported in 1983, were mostly consumed during last year and only insignificant quantities have been carried forward to 1984.

As regards the allegation that pesticide containers do not carry the expiry date and often are not marked with retail prices, PAPA clarified that the decision for these label requirements was taken late last year when most of the pesticides had already been imported and distributed to the dealers.

It was agreed, the Press release said, that all pesticides imported in 1984 will meet these label requirements and this condition has been met in respect of pesticide stocks imported in 1984 which will constitute over 95 per cent of the sales during the current year.

PAPA member companies have experienced isolated and insignificant cases of pesticides adulteration and other malpractices by some of the dealers which have been reported to the Government from time to time for corrective measures.

PAPA apprehends that some of the dead stocks of pesticides lying with the Agriculture Departments continue to find their way to some of the dealers.

PAPA said during the last three years, pesticide distributors had launched farmer education programmes and had offered pesticides on credit in sealed and convenient small packs.

It is estimated, it continued, that in 1983-84 season, 28 per cent of the cotton cropped area was treated against the pest attacks and the farmers who applied adequate number of insecticide sprays to their crop were able to minimise crop losses due to pest infestation. However, yields in most of the untreated or inadequately sprayed areas were very poor.

PAPA shares the views that damage to 1983-84 cotton crop was mainly due to untimely rain and inclement weather during the sowing and growing period, resulting in physiological disorder of the plants, increased pest infestation and ancillary causes besides inadequate plant protection measures.

PAPA, however, said while the farming community, to a greater

extent, is satisfied with the quality of pesticides and being offered by PAPA there may be a small number of farmers who are not happy with the change in Government's pesticide policy resulting in removal of subsidy and withdrawal of free aerial spraying.

"There are also number of farmers who are unable to achieve optimum yields because they do not follow the pesticide usage recommendations correctly and/or take inadequate plant protection measures.

PAPA urged such farmers to follow the pesticide usage recommendations correctly and give adequate number of sprays to their crops:

NLC TO SPRAY COTTON CROPS

Karachi DAWN in English 5 Sep 84 Business Supplement p 1
[Text]

NAWABSHAH, Sept. 4: The National Logistic Cell will spray on present cotton crop on loan basis, which would be recovered from growers after the sale of cotton.

This was disclosed by Deputy Commissioner Nawabshah, Mr Rasool Bux Baloch while addressing at a katchery held at Sabu Rahu some 35 kms from Nawabshah.

He urged upon the local zamindars, abadgars and growers of cotton crop, to get benefit from this scheme and spray their cotton without further delay.

During the katchery the D.C. directed the district officials to hold katcheries in their respective areas and redress the grievances of poors.

Earlier, Chairman Union Council Kumb Leema welcomed and put problems such as up-gradation of middle to high school, installation of public call office at Sabu Rahu, and construction of katcha roads in their areas.

He also received many applications about shortage of irrigation water in Nather Minor, and ordered the Assistant Commissioner Sakrand to hold enquiry and report within week's time positively.— PPI

COTTON CROP TO BE SPRAYED WITH DDT

Karachi DAWN in English 26 Aug 84 p 8

[Text]

cotton crop.

provinces and reported back that might cause cancer. 700,000 acres in Punjab and spray on the standing cotton crops. the Department has selected DDT.

The team was headed by Air Comdr. Pasha, the newly appointed serviceable with the Department. Director of Operations in the Department of Plant Protection.

Experts pointed out that 1:2 million acres is the minimum area to be covered by aerial spray at the moment and this might increase once the operations begin.

The Department is spraying DDT on cotton crop, which is banned in

The Plant Protection Depart-other countries because of being inment will cover 1.2 million acres of jurious to human health. The cottonseeds are used for extracting oil A survey team visited both the for cooking and it is feared that it

Imported pesticides are avail-500,000 acres in Sind need aerial able in plenty in the country, but

Out of 22 aircraft, about 12 are

CSO: 5400/4730

END